



College AND UNIVERSITY Business



**Will your new school
make students *faster* readers?**

Of course, no school building can increase a child's basic reading aptitude.

But, through improved physical surroundings, you *can* increase students' alertness, initiative and interest—can literally help them become *faster* readers. And that's important, because, as every educator knows, faster readers are *better* readers.

Experience indicates, for example, that most children show decided improvement in all subjects when they're moved from stuffy, overheated surroundings to classrooms in which level temperatures, adequate fresh air and proper humidity are provided.

Knowing this, more and more school officials are insisting on modern Honeywell automatic controls for their new

schools. Honeywell equipment has been *proved* more accurate, more dependable. Honeywell controls are simpler, too—consistently cost less to maintain. And Honeywell serves you with the largest, most widespread staff of control experts in the industry.

You owe it to your students *and* your budget to get all the facts and figures about Honeywell controls for *your* new school. It's easy to do. Simply call your local Honeywell office. Or write Honeywell, Dept. CB-9-89, Minneapolis 8, Minnesota. Why not do it *today*!

MINNEAPOLIS
Honeywell



First in Controls



CLAUD BEELMAN and
HERMAN SPACKLER, associate
architects
LESTER R. KELLY
mechanical engineer
C. L. PECK
general contractor
S. GLEN HICKMAN CO.
plumbing contractor
CRANE COMPANY
plumbing wholesaler

Wilshire Boulevard, Los Angeles! . . . a famous address in a famous city is now in process of becoming even more celebrated. The magnificent new business home at 3440-50-60 on this renowned boulevard is destined to house western offices of U. S. big business.

CLIMATE AS YOU LIKE IT INSIDE FOUR GLASS WALLS



Photo
"Dick" Whittington

Approaching this trio of companion buildings you'll be greatly impressed by the broad, welcoming Tropical Terrace which extends the full length of the boulevard frontage. Inside you'll be greeted by the zone-controlled air conditioning which gives each tenant his ideal in office climate. This is but the first of many features which assure efficient and thor-

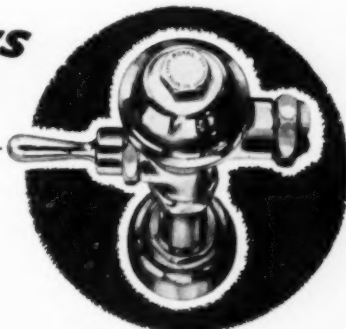
oughly pleasant business living. To attain this desirable result requires expert judgment in planning and in the selection and installation of all equipment. As are thousands of other notable buildings, these three are completely equipped with SLOAN Flush VALVES, famous for efficiency, endurance and economy—more proof of preference that explains why. . .

more **SLOAN Flush VALVES**
are sold than all other makes combined



SLOAN VALVE COMPANY • CHICAGO • ILLINOIS

Another achievement in efficiency, endurance and economy is the SLOAN Act-O-Matic SHOWER HEAD, which is automatically self-cleaning each time it is used! No clogging. No dripping. When turned on it delivers cone-within-cone spray of maximum efficiency. When turned off it drains instantly. It gives greatest bathing satisfaction, and saves water, fuel and maintenance service costs. Try it and discover its superiorities.



Specify Von Duprin B²

the finest
vertical rod exit device

The Von Duprin B² is widely accepted as the finest fire and panic exit device of the vertical rod type . . . and for good reason. The B² incorporates every refinement known to the exit hardware industry . . . to assure a lifetime of unfailing performance.

The entire B² device is of drop-forged architectural bronze with precision-made bearing metal interior parts. For extra strength and service, the crossbar is X-Bar reinforced . . . an extruded X-shaped bar runs the full length of the crossbar. For extra safety, the device is double acting. Pressure either up or down on the crossbar retracts the 3/4" throw latch bolts. Latch bolts operate independently to provide satisfactory service even though the door warps or shrinks.

Inspect the B²—see how it operates. You'll agree that for performance, quality, and design, the Von Duprin B² device is the *very finest*.



"THE SAFE WAY OUT!"



**FOR ACCIDENT
HAZARD**



For your convenience, Von Duprin "Exit Engineers"—factory representatives and contract hardware distributors—are located in key cities across the nation. There's one in your area and it can pay you to know him. He has the engineering and hardware

background to consult with you in exit planning. And he has the complete facts on Von Duprin exit devices and accessory hardware to save you time on specifications. Call on him—often. If you don't know his name, write:

VONNEGUT HARDWARE CO., VON DUPRIN DIVISION • INDIANAPOLIS 9, INDIANA

College AND UNIVERSITY Business



EDITORIAL DIRECTOR
ROBERT M. CUNNINGHAM Jr.

EDITOR
HAROLD W. HERMAN

ASSISTANT EDITORS
MILDRED WHITCOMB
BEULAH H. TORSET

PUBLISHING DIRECTOR
J. W. CANNON Jr.

DIRECTOR MARKET RESEARCH
RUSSELL T. SANFORD

PRODUCTION MANAGER
LEO KEDROK

PUBLISHING AND
EDITORIAL OFFICES
919 N. MICHIGAN AVE.
CHICAGO 11, ILL.
SU perior 7-6402

EASTERN OFFICE
101 PARK AVE.
NEW YORK 17, N.Y.
MU rray Hill 3-2445

PACIFIC COAST
REPRESENTATIVES
McDONALD-THOMPSON
LOS ANGELES, SAN FRANCISCO
SEATTLE

Published monthly by The Nation's Schools Division, The Modern Hospital Publishing Co., Inc., 919 North Michigan, Chicago 11, Ill., U. S. A. Otho F. Ball, president; Raymond P. Sloan, vice president; Everett W. Jones, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Copyright 1951, by The Nation's Schools Division, The Modern Hospital Publishing Co., Inc. Acceptance under Section 34.64, P.L.&R., authorized. Published on the tenth of the month of the date of issue. Change of address should be sent thirty days in advance of publication date.

Vol. 11, No. 3, September 1951

September 1951

FEATURE ARTICLES

Balancing the Budget on Reduced Revenues	17
GERARD BANKS	
The Business Officer's Role in Top Management	19
DAVID D. HENRY	
Let's Not Jeopardize Our Tax Exemption Status	22
HARRY L. WELLS	
Speeding Up Registration by Machine Methods	25
JAIME O. VALERA	
The State of the Union	27
BRUCE POLLOCK	
A Guide for the Operation of Student Publications	29
DARIO POLITELLA	
An Open Letter of Opposition	31
EARLE WASHBURN	
Virginia Tech Honors Its War Heroes with "Peace" Memorial	32
MARCUS L. OLIVER	
Men's Residence Hall Built in Record Time and at Low Cost	34
EDWARD M. TOURTELOT Jr.	
B & G Building Is a Morale Raiser	39
SAM F. BREWSTER	
Freedom and Arts United in Design of Memorial Library	42
RUBY E. DARE	
Standards for Residence Halls With Particular Reference to Women	45
EDITH L. STALLINGS	
How a California Cafeteria Controls Traffic	47
SCOTT WILSON	
Legality of Revenue Bonds Issued for Building Dormitories	49
T. E. BLACKWELL	
Financing Residence Facilities Through Self-Liquidating Program	50
W. T. INGRAM	

QUESTIONS AND ANSWERS	8
LOOKING FORWARD	18
NEWS OF THE MONTH	52
NAMES IN THE NEWS	70
DIRECTORY OF ASSOCIATIONS	74
CLASSIFIED ADVERTISING	76
WHAT'S NEW	81
	3

EDITORIAL BOARD

GENERAL ADMINISTRATION

N. A. WAHLSTROM *University of Washington*
 LLOYD MOREY *University of Illinois*
 T. E. BLACKWELL *Washington University*

FINANCE AND ACCOUNTING

BOARDMAN BUMP *Mount Holyoke College*
 CHARLES SPARENBERG *University of Texas*
 GEORGE GREEN *California Institute of Tech.*

PERSONNEL AND OFFICE MANAGEMENT

GERARD BANKS *College of Puget Sound*
 H. H. BROOKS *Coe College*
 CHARLES W. HOFF *University of Omaha*

PURCHASING AND STORES

HENRY B. ABBETT *Purdue University*
 GEORGE S. FRANK *Cornell University*
 CLAUDE HOUGH *The Principia*

DESIGN AND CONSTRUCTION

HENRY L. KAMPHOFFNER *North Carolina State*
 ERNEST L. STOFFER *University of Illinois*
 PHILIP E. KEENE *State College of Washington*

PLANT OPERATION AND MAINTENANCE

A. F. GALLISTEL *University of Wisconsin*
 E. J. BEHLER *Yale University*
 PAUL H. ELLEMAN *Ohio State University*

FEEDING AND HOUSING

WILLIAM DAVIS *Brown University*
 TED REIDER *University of Iowa*
 CHRISTINE RICKER *Stanford University*

AUXILIARY ENTERPRISES AND RELATED ACTIVITIES

WILLARD BUNTAIN *Northwestern University*
 GEORGE BAUGHMAN *University of Florida*
 JAMIE ANTHONY *Georgia Institute of Tech.*

STUDENT ENTERPRISES AND SERVICES

ROBERT W. FENIX *Willamette University*
 PORTER BUTTS *University of Wisconsin*
 IRWIN K. FRENCH *Middlebury College*

EDITORIAL CONSULTANTS

LYMAN FLOOK *University of Chicago*
 FORREST ABBOTT *Columbia University*
 SAM F. BREWSTER *Alabama Polytechnic Inst.*
 L. H. FOSTER JR. *Tuskegee Institute*
 WALTER W. KRAFT *University of Oklahoma*
 C. F. MCELHINNEY *University of Houston*
 REVEREND J. LEO SULLIVAN, S.J. *Holy Cross*
 NELLIE GLEASON *Grinnell College*
 T. C. CARLSON *University of Arkansas*

Among the Authors



David D. Henry

DAVID D. HENRY, president of Wayne University, Detroit, discusses on page 19 the part the college business officer should take in top management circles of the institution. President of Wayne since 1945, Dr. Henry had previously served as executive vice president and prior to that as professor of English and assistant to the executive vice president. He is currently the secretary-treasurer of the Association of Urban Universities and was president of the association in 1946. He is a member of several honorary fraternities and societies and takes an active part in civic affairs in Detroit. He is a member of the Michigan Council on Education and was its president from 1937 to 1940.



Harry L. Wells

HARRY L. WELLS, vice president and business manager of Northwestern University, points out on page 22 the possibility of colleges and universities losing the tax exemption status which they have enjoyed for so long a time. Years as an executive in private business makes it possible for Mr. Wells to discuss the subject in terms of both institutional and business operation. He was successively a manufacturing executive of B. Kuppenheimer & Co., operating executive of Hart, Schaffner & Marx, and vice president of Bauer & Black. He was also assistant and acting chief of the uniform division of the U.S. Army in 1918. He became business manager of Northwestern University in 1934 and vice president and business manager in 1937. Mr. Wells' hobbies include farming and the study of agricultural problems.

BRUCE POLLOCK, business manager and treasurer of Carleton College, reviews on page 27 the problems involved in attempting to work out a contract with a local union as far as the nonacademic staff was concerned. Prior to accepting his present appointment at Carleton in 1936, Mr. Pollock had been assistant treasurer of the First National Bank of Minneapolis from 1928 to 1936 and before that had served as cashier in various banks in North Dakota. He has been a member of the executive committee of the Central Association of College and University Business Officers during two different administrations—1941-42 and 1947-48. He is proud of a family of two sons and two daughters.



Dario Politella

DARIO POLITELLA, assistant professor of journalism and adviser to student publications at Kent State University, Kent, Ohio, suggests on page 29 some of the policies to be followed in setting up a guide for student publications. He was editor of his high school and college newspapers and worked for some time as manager of the Seneca Falls bureau of the Geneva (N.Y.) *Daily Times*. Mr. Politella took his undergraduate work at the University of Massachusetts and his M.A. from Syracuse University.



GREATER VACUUM POWER MEANS BETTER CLEANING

...WITH **SPENCER** PORTABLE VACUUM CLEANERS

The day to day job of cleaning could be reduced by efficiency experts with a time and motion study. Perhaps a simpler way to improve results is to be sure that each motion picks up more dirt. That briefly is the extra value that Spencer portables give you. Greater vacuum power sucks in more of the dirt

and dust. Properly designed Spencer Tools for each job search out the dirt more efficiently. Designed for cleaning bare floors, walls, carpets, rugs, draperies and upholstery, and providing wet or dry cleaning with the same machine, Spencers pay for themselves in more efficient cleaning.



THE SPENCER TURBINE COMPANY • HARTFORD 6, CONNECTICUT



CUB



Please send my copy of A GUIDE TO EASIER CLEANING and Bulletin 114E



Name _____



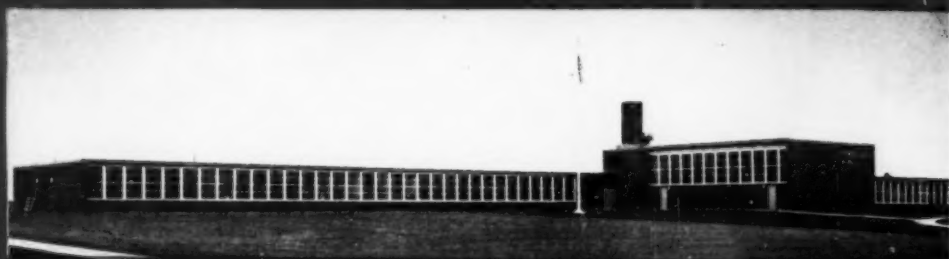
Street & No. _____



City & State _____

SPENCER
HARTFORD

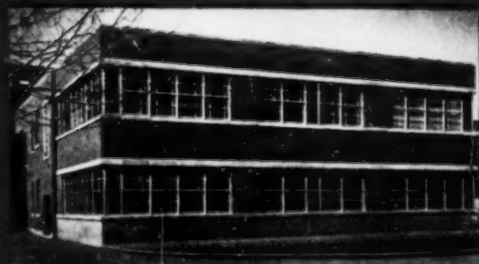
for design...for utility...for economy...



Abbey Lane School, Long Island
Architect: Franklin P. Woodworth
Contractor: Joseph Stuebel



West Star High School
Architect: Armstrong, Ford and Elmer
Contractor: Gough and Sons



University of Texas, Austin
Engineering Building
Architect: Gaylor and Woodworth
Contractor: A. W. Napleton Sons & Co.



University of California
Architect: Thomas A. Higgins Adams
C. H. Gilling
Contractor: George Sells Co., Inc.



specify

Adlake

aluminum windows

Yes, their combination of maintenance-free service, complete weather-tightness and handsome, modern appearance makes ADLAKE Aluminum Windows ideal for school installations.

For ADLAKE Windows ultimately pay for themselves by eliminating all maintenance costs except routine washing—and they last as long as the school itself! What's more, only ADLAKE Windows offer the woven-pile weather stripping and patented serrated guides that assure minimum air infiltration and finger-tip control. And they keep their smart good looks and easy operation for life!

Find out how Adlake Aluminum Windows can bring greater economy and increased efficiency to schools! Drop a card, today, to The Adams & Westlake Company, 1118 North Michigan Avenue, Elkhart, Indiana. No obligation of course.



Administration Building, University of Michigan
Architects: Harley, Ellington & Day
General Contractor: Bryant & Detwiler

THE Adams & Westlake COMPANY

Established 1857—ELKHART, INDIANA—New York • Chicago



Questions and Answers

Janitors' Work Schedule

Question: We are planning to set up a work schedule and floor area assignment for members of our janitorial staff. Do you have any suggestions as to how this might be handled?—E.R., N.Y.

ANSWER: First, I should study the building, or buildings, to find out what, if any, structural deficiencies there were that would influence the working time of the employees. I should have to know the policies of the institution both as to the amount and standard of cleaning to be given, and the labor regulations governing the employee.

In outline, the procedure would be as follows:

1. Analyze every job in the department.
2. Time the various procedures, such as dusting and mopping.
3. Estimate the frequency of cleaning operation for each area.
4. Determine whether the employee can work without interruption from the pedestrian traffic around him, and also whether the area is obstructed with furniture or whether it is clear.
5. Check the time employees must spend waiting for elevators, the distance between refuse stations and hopper closets and the work area, and the availability of supplies.
6. Determine whether the work can be done by machine or must be done by manual methods.
7. Allocate work loads on: (a) sectional basis; (b) area basis; (c) room equivalent basis; (d) square footage basis; (e) work unit basis; (f) clocked time basis; (g) combination of one or more of these.

The assignment or allocation of work loads is most important and for that reason the different methods merit some explanation as to their operation.

1. The sectional basis is one of the most commonly used types of scheduling in residence halls, hospitals and hotels. A "section" may be a whole floor or an entire building. It has very dubious merit as a way of determining work loads.

2. The area basis is very like the sectional basis. It is divided arithmetically. For example, a building has

25,000 square feet of floor area, and the budget permits only five cleaning employees. If the area is divided equally, 5000 square feet per employee, inequities are bound to result because some areas are more difficult to clean than are others.

3. The same complaint can be registered against the "room equivalent" basis. Assigning a maid a certain number of rooms, which may be anywhere from 12 to 30, without taking into account the delays and difficulties that may hamper her and the amount of cleaning that must be done in each room is indefensible.

4. The square footage basis is usually used in public buildings and is generally used in office buildings. All schedules and services are based upon a thousand square feet per hour per worker, regardless of how many or how few desks, filing cabinets, and chairs may be crowded into the space.

5. The work unit, or Gilbert formula, often is considered the fairest and most economical. A count is first made of every lighting fixture, the number of square feet of each type of floor covering, the number of lineal feet of movable partitions, and so forth. A time study will indicate the time necessary to perform various services, such as mopping, waxing and carpet cleaning. The final step is to have a count made of every piece of furniture and equipment in each room: chairs, desks, filing cabinets, lamps, couches, clothes trees, cabinets and shelving. On the basis of this count and time study, F. L. Gilbert, who

devised the formula, works out a unit for each cleaning job. For example: 1 unit for each 10 square feet of uncarpeted floor; 1½ units for each 10 square feet of carpeted floor; 1 unit for each bay of shelves; 1 unit for each piece of furniture in the office; 2 units for each "stuff"—so called because desks usually have so much stuff on them. After considerable research, Mr. Gilbert discovered that each worker could accomplish 1200 units of work in a 5¼ hour shift, or about 225 units per hour.

6. The stop-watch technic of scheduling loads on the basis of the length of time taken to complete a cleaning operation.

7. Many building operators prefer a combination of the Gilbert formula and the clocking system.

The key to a successful maintenance and work load schedule is in having sound supervision.—ALTA M. LABELLE, *housekeeping consultant*.

Night-Watchman Service

Question: Does a small college need a night watchman? Should he have responsibility for student discipline as well as for property protection? Should he be armed with a weapon?—C.D.T., N.Y.

ANSWER: Yes, for protection against fire, burglary and vandalism, if nothing else. Watchclock stations are helpful. The watchman should visit them at different times each night on periodic rounds.

A business officer should not attempt to pass on the question of student discipline responsibility; that is a matter for the student deans. Most business officers are willing to function extra-jurisdictionally, but I believe that such responsibility should be strictly limited under direction of the academic administration.

The watchman should not be armed. A college cannot afford financially or from the standpoint of public relations to assume the risk of a shooting incident harmful to its students. If some weapon is required to instill confidence in the performance of his duties, the watchman may be permitted to carry a blackjack or a tear gas gun.—BRUCE POLLOCK, *business manager*, Carleton College.

If you have a question on business or departmental administration that you would like to have answered, send your query to COLLEGE and UNIVERSITY BUSINESS, 919 North Michigan Avenue, Chicago 11, Ill. Questions will be forwarded to leaders in appropriate college and university fields for authoritative replies. Answers will be published in forthcoming issues. No answers will be handled through correspondence.

Another IBM Service to Schools...

Watch the World's Champion Typist in Your Own Classroom!



Electric Typewriters

INTERNATIONAL BUSINESS MACHINES

"Electric Typing Time," IBM's new film, is audio-visual teaching as you want it! Instructive! Inspiring! Entertaining! And in full color—with sound!

Your students will see Stella Pajunas, present unchallenged champion, demonstrate expert typing techniques. They'll see a young typist applying skills learned in typing class to an IBM Electric Typewriter in a modern business office.

"Electric Typing Time" can be shown to your classes in 20 minutes. Prints are available without charge for use on your 16mm. sound equipment. Reservations are being accepted in order of receipt. Send yours in now.

IBM, Dept. CU-4
590 Madison Ave., New York 22, N. Y.

☐ We would like to see your new film,
"Electric Typing Time," on _____
(date)

☐ Please send complete typing
instructional kit.

Name _____

School _____

Address _____

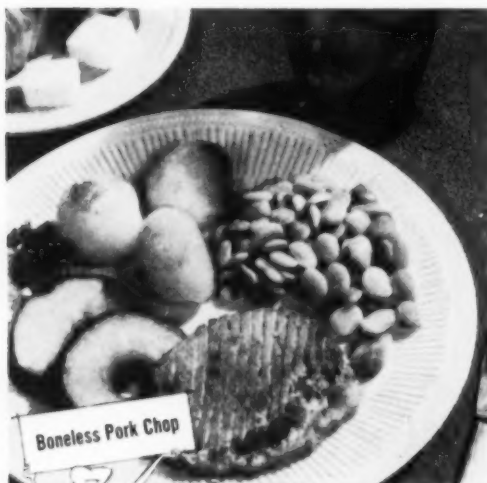
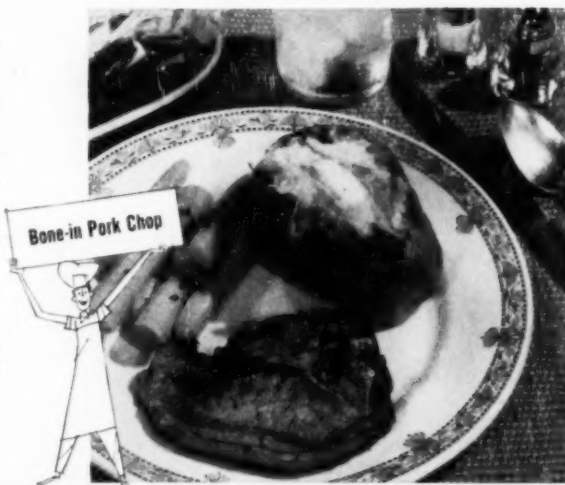
City _____ State _____

Know your portion costs in advance! Serve Armour Fresh Frosted Meats!

You know the *exact cost* of each meat portion in advance when you serve Armour Fresh Frosted Meats. Each portion is *uniform* in size—measured accurately to assure you exact figuring of portion costs.

Armour Fresh Frosted Meats enable you to keep your costs *down*, because there's no waste—the meat is ready to serve. And you save time, too—there's no defrosting necessary. Portions are layer packed in 10-lb. boxes for convenient removal.

There's a wide variety of these easy-to-store, easy-to-handle Armour Fresh Frosted Meats to choose from. Here are three you'll want to feature on your menu now—Pork Steaks, Bone-in Pork Chops and Boneless Pork Chops.



ARMOUR

AND COMPANY

Hotel and Institutions Department
Section CC, Chicago 9, Illinois

For complete information on Armour Fresh Frosted Meats, contact your Armour salesman, or write to Armour and Company.

**YOU'LL
SELL MORE...**

**WHEN
YOU SERVE...**

FOUNTAIN TREATS

...in individual moistureproof packages



about $1\frac{1}{2}$
PER SERVING

Fountain Treats offer a quick, inexpensive way to dress up hot and cold drinks...sundaes and other ice cream desserts. The minute your patrons see the individual glassine envelopes, containing two sweet cookies, one vanilla and one chocolate, they'll know you are offering a little something extra. And, when they see the NABISCO name they'll recognize it as a top quality product. *Everybody—everywhere—likes Nabisco's Crackers.*



You'll find big economy in serving Fountain Treats because there's no waste of time in serving them...no waste caused by staleness or sogginess...no waste of "bottom-of-the-box" pieces and crumbs. Buy and serve Fountain Treats and you'll be treating yourself to more profits...and treating your customers to something especially good! *Always Fresh...250 distributing branches assure prompt and frequent delivery.*



SEND FOR THIS FREE BOOKLET packed with ideas on how to increase sales and cut food cost with NABISCO products including: *PREMIUM Saltine Crackers • TRISCUIT Wafers • RITZ Crackers • DANDY OYSTER Crackers • OREO Creme Sandwich*

A PRODUCT OF

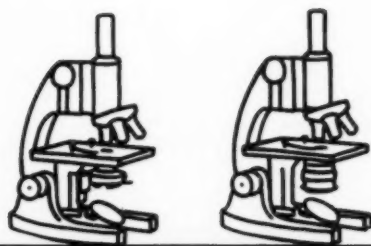


National Biscuit Co., Dept. 21, 449 W. 14th St., New York 14, N.Y.
Please send your booklet "Around the Clock with NABISCO."

Name _____ Title _____
Organization _____
Address _____
City _____ State _____

NATIONAL BISCUIT COMPANY

New!



**THE WORLD'S FINEST
LABORATORY
MICROSCOPES** set higher
standards for comfort, accuracy and
speed, in microscopy with new
"Years-Ahead" advanced design
features.

BAUSCH & LOMB

Dymoptic **LABROSCOPES**



● New *Dua-rol* LOW POSITION Ball-Bearing and Roller Fine Adjustment—critical focus, easier and faster; less wear, longer life. New *Roto-sphere* BALL-BEARING Nose-piece—most accurate parcentricity and smoothest rotation ever.

● New Mechanical Stage with LOW POSITION Controls for comfortable operation; 10X Achromatic Objective; New type Variable Focus Condenser for low-cost models; New attachable Integral Illuminator. New *Tuning Fork* Mirror Bracket; New sturdy construction and prestige styling.

PLUS the world's finest optical system . . . and many other new and service-proved advantages exclusive with or pioneered by Bausch & Lomb.

Write for a demonstration and for complete information on this new line of microscopes. Bausch & Lomb Optical Co., 767-9 St. Paul St., Rochester 2, N.Y.



CLIP AND MAIL THIS COUPON TODAY

BAUSCH & LOMB OPTICAL CO.
767-9 ST. PAUL ST., ROCHESTER 2, N.Y.

Please send me complete information on the new B&L Dynoptic Labroscopes.

☐ I would like a demonstration.

NAME _____

SCHOOL OR FIRM _____

ADDRESS _____

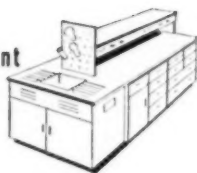
CITY _____ STATE _____

*To meet future-load
requirements our new
laboratory will have
to be flexible. How
can we make sure
it will be?*



*Get help from Hamilton
on your plans. Their
Field Engineering Service
has helped solve
similar problems
hundreds of times.*

For work-designed laboratory equipment



it's *Hamilton*, of course!

Get help from Hamilton, without cost or obligation.
Write for Hamilton's newest Laboratory Equipment
Catalog No. 211-R or for the name of the Hamilton
Field Engineer nearest you. Remember—when
there's work to be done, get help from Hamilton!

Hamilton Manufacturing Company
Two Rivers, Wisconsin

© 1950 Hamilton Manufacturing Company

Love letters to a lamp!

the GUTH 4-ft. SLIMLINE



"Here's to GUTH 4-ft. Slimlines! They're more profitable to handle and easier to store than the long 8-ft. fixtures... and I have far less loss from breakage."

Lighting Wholesaler
Pittsburgh, Pa.



"I feel safer about specifying GUTH 4-ft. Slimlines. No more complaints from my clients because of the long, unwieldy 8-ft. lengths. Takes 50% less manpower to install and maintain."

Lighting Engineer
St. Petersburg, Fla.



"My clients are still praising me for suggesting convenient, short GUTH 4-ft. Slimlines. Gives them all the economy and functional advantage of Slimline lighting without the clumsy 8-ft. length."

Architect
Los Angeles, Cal.



Last year we started out with both 4- and 8-ft. slimline — and 4-ft. has won by a landslide! Sales have zoomed higher than anyone had expected. Lighting men everywhere have fallen in love with GUTH 4-ft. Slimline. Here's what some say:



4-Ft. Slimline now available in every 2- and 4-lamp fixture in the entire GUTH line! See your GUTH resident engineer, or write for Bulletin 871-N giving full details.

Guth **LIGHTING**
THE EDWIN F. GUTH COMPANY • ST. LOUIS 3, MISSOURI
Leaders in Lighting since 1902

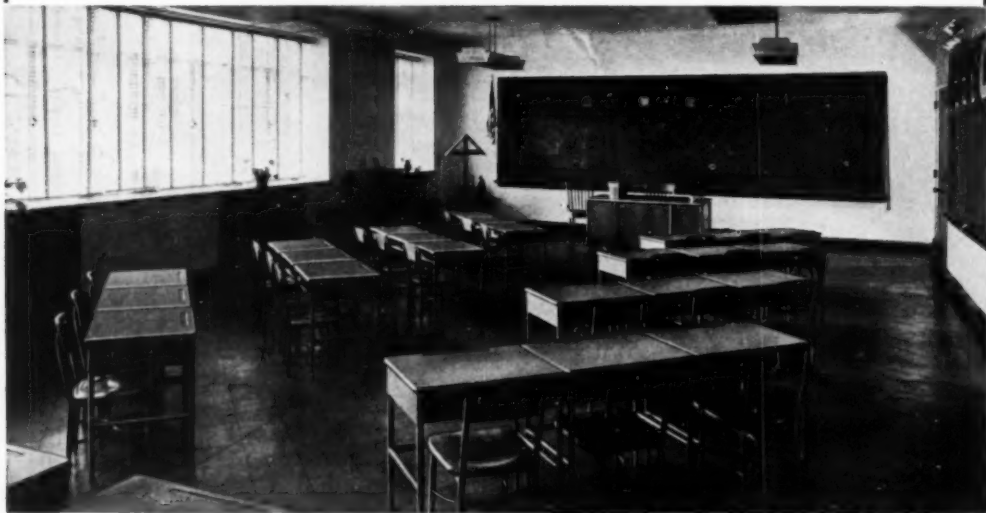
ACADEMY OF THE ASSUMPTION (Raven Hill)



MILLERET HALL

PLANNED AND FURNISHED FOR THE YEARS AHEAD

Substantial construction and far-sighted planning promise long years of service for the new Milleret Hall at the Academy of the Assumption, (Raven Hill) Philadelphia. This fine new building was designed for the Sisters of the Assumption by Henry D. Dagit and Sons, Philadelphia. The installation of Heywood-Wakefield Tubular Steel School Furniture was arranged through Garret-Buchanan Company, distributors for Heywood-Wakefield Company, One Park Avenue, New York 16, N. Y.



THE SAME forethought reflected in its construction is evident in the selection of Heywood-Wakefield Tubular Steel Furniture for this modern building. As this classroom shows, Heywood-Wakefield furniture permits flexibility of arrangement to meet the needs of specific classes. Its durable tubular steel construction makes units light enough to be moved readily by both

pupils and the maintenance staff. Shown here are Heywood-Wakefield Table-Desk S-1008 OF and all-purpose Chair, S-915. Like most Heywood-Wakefield units, these are available in a wide range of graded sizes. Write for our illustrated catalogue of Heywood-Wakefield Tubular Steel School Furniture. Heywood-Wakefield Company, School Furniture Division, Menominee, Michigan.

*Visit the Heywood-Wakefield display at Space 66,
Royal York Hotel, Toronto, October 15 through 18*



BALANCING THE BUDGET ON REDUCED REVENUES

GERARD BANKS

Business Officer
College of Puget Sound, Tacoma, Wash.



WHILE THE PRINCIPAL THOUGHTS CONTAINED herein are beamed toward the harassed business manager of a liberal arts college, the basic philosophy expressed should be of interest to the chief business officer of large and small universities who are faced with similar problems.

It appears that many of my colleagues believe the situation we now face has all the features of a first-rate calamity. My thesis is that the necessity of balancing the budget on reduced revenues need not be an unmitigated evil. I take this point of view knowing full well that I may be dubbed a Pollyanna in educational circles.

Foremost among the benefits that may accrue from the stern requirements of a balanced budget for 1951-52 is the opportunity it gives the president and the business manager to reexamine and reevaluate the total activities of an institution, to determine what must be retained and what may be sloughed off. During prosperous times many activities and services develop on our campuses that by no stretch of the imagination can be said to make a distinct contribution to the educational process. Needless to say, such extraneous activities and services should be pruned first.

Auxiliary enterprises in some schools are operated in a slipshod fashion or on a nonbusinesslike basis and, in consequence, they become a steady drain on educational revenues. Now is the time to put such operations on a firm footing or else to lease them to others.

A second opportunity presented to college officials by the necessity of a closely hauled budget is that of a reexamination and a redefinition of school objectives. This also is the task of the institution's policy-making bodies—the trustees and the faculty. Some schools wander all over the educational landscape when it comes to naming their specific purposes and objectives. As a result, their graduates go out without any discernible stamp having been impressed upon them by the institution. On the other

hand, there is a minority of institutions whose objectives are few but are clearly outlined in the minds of their administration and faculty. Such colleges place their indelible stamp upon all their graduates, so that the character of the institution is known far and wide. With less money to spend, it becomes ever more important for a college to see that it obtains definite results with the money it does spend. The ability to obtain such results is what distinguishes an able college administration from one that is not so able.

A third beneficial aspect of the present-day situation can come from the opportunity it affords the president and business manager to redeploy the money spent for educational purposes. Often the areas of growth at an institution are determined by pressures applied from without, or by personal considerations, or by the efforts of the administration to mold the institution according to what the public thinks or demands. The conflict between Town and Gown has been perennial. At no time has the town ever known what is best for the gown.

If American life and culture are not to go the way of all past cultures, institutions of higher learning must be given complete freedom to determine not only their destiny but the destiny of the community and state as well. Especially in times of stress and uncertainty must our colleges and universities be centers of independent thought and study, regardless of the pressure that may be applied upon them to serve the immediate interests of contemporary life. Now at a time when the use of an institution's funds must be critically appraised, the opportunity again presents itself to chart the direction in which the institution should develop if it is to attain its educational objectives and ideals.

I contend that if a business officer approaches philosophically the immediate task of constructing, along with the president, a realistic budget for the next academic year he can wrest from a bad situation the utmost benefit for his institution.

Looking Forward

Tidelands Oil Royalties

THE SPEECH OF SEN. LISTER HILL OF ALABAMA IN behalf of his amendment to Section 5 of Senate Joint Resolution 20 merits review by college administrators.

Senator Hill proposes that royalties from oil produced from the submerged lands of the continental shelf adjacent to the shores of California, Louisiana and Texas be dedicated now for "the long-range needs of the education of the nation's children—all its children—and placed in a special account in the Treasury of the United States. The funds would be available as grants-in-aid of primary, secondary and higher education."

The Alabama senator proposes the creation of a national advisory council on grants-in-aid of education which should "study and develop a plan to be reported to the President, who shall submit the report to the Congress not later than Feb. 1, 1953, for the equitable allocation and use of the income from this oil capital for primary, secondary and higher education.

"The function of this council is not to be in substitution for the work that is being done to provide federal aid to elementary and secondary education out of tax revenues. The federal royalties from these oil deposits cannot be expected to be uniform from year to year, and it is contemplated that the advisory council will therefore report on how they can best be utilized as an extra fund out of which can be provided federal assistance to primary, secondary and higher education, in addition to such essential aid as the Congress may provide as regular support to education."

According to the geological survey of the Department of the Interior, there is an estimated potential of 15,000,000,000 barrels of oil in the tidelands area of California, Louisiana and Texas. At today's price of \$2.70 a barrel, the 15,000,000,000 barrels are worth \$40,500,000,000—more than \$40,000,000,000 of which would belong to all of the people of the United States after the amount of income payable by the Secretary of the Treasury to the tidelands states had been deducted.

The senator's proposal stems from decisions by the U.S. Supreme Court in *U.S. v. Texas* (339 U.S. 704, Oct. 16, 1950), and *U.S. v. California* (332 U.S. 19, June 23, 1947) in which the court held that "the ownership and proprietary rights to this marginal sea, as well as the governmental powers of regulation and control, was in the United States of America as a whole."

The issue involved in Senator Hill's proposal is most controversial. It removes from the coastline states of

this nation the regulation and control of coastal waters and submerged lands contiguous thereto, and deprives such states of income derived from coastal operations. Though royalties on oil appear to be the present issue, coastal states sense the establishment of a legal precedent that might bring oyster, shrimp, sponge and fishing industries under federal control.

Though the use of oil royalties for financing education at a national level may appeal to many, the danger of a long-range trend toward federal encroachment on states' rights is an issue that must be considered when the problem is weighed.

Reciprocity

IT BECOMES APPARENT, AS ONE SITS IN ON VARIOUS meetings of the college administrative family, that much would be gained if all of its members could meet together. One outcome, undoubtedly, would be better understanding of the other fellow's point of view.

As you sit in on a food directors' meeting you discover problems of misunderstanding that would be easily cleared if the business manager were present. Likewise, a director of physical plant is having operational and administrative troubles because the chief business officer is unaware of some technical problem involved in operating a campus plant. The list of such problems could be expanded at considerable length without difficulty.

Would it not be logical for officers of national groups in the college administrative hierarchy to invite leaders of other groups to their meetings? It would be mutually beneficial for the president or members of the executive committee of a regional business officer association to sit in on a national meeting of the Association of Physical Plant Administrators of Colleges and Universities or the Association of College Unions. Conversely, it would be enlightening for food and residence hall directors to attend a meeting of business officers or college purchasing agents.

A lack of appreciation of the other administrators' problems is often the only reason for the suspicion or jealousy that sometimes develops. While a joint meeting of interested groups at the national level would not solve all problems, it might make for harmony and better cooperation.

Are any national groups ready to extend an invitation to other representative members of the administrative family? It ought to be worth a try.



The business officer's *rôle in* **TOP MANAGEMENT**

DAVID D. HENRY

President, Wayne University, Detroit

THE BUSINESS OFFICER* IS INDISPENSABLE in any effective educational institutional operation; he is as essential to the total program as the chief administrator or any other divisional head, including instruction. Organization charts may be concentric or vertical, titles may be altered, functions may be regrouped and reassigned, but the business functions continue as a major segment of institutional administration, in large part determinative of the effectiveness of the total organization.

This statement is true, however, in a functional sense, not a personal one. If the business officer regards himself as indispensable as a person, then, of course, he can be a drag on institutional effectiveness. The business officer who does not share his responsibilities with a competent staff, who arrogates to himself all final decisions, who insists that he alone through his signature or spoken word must pass upon every action of his department is inviting institutional trouble. The continuity that his office should provide is not only endangered by his own physical limitations, but his associates are

stultified and become robots in a mechanized procedure.

The business office, more than any other division, should represent the best in sound personnel administration. Here the staff members are more closely interdependent and are therefore as a group creative or static. A great portion of the institution's essential procedural controls originate in the business office and become instruments for getting a job done or else they change to restrictive red tape as the office uses and organizes its resources aggressively for continuing improvement or sluggishly falls victim to its own bureaucracy. The latter is truly dangerous, for "bureaucracy," said Lloyd George of England, "is like malaria; once it gets in your blood you never seem to get rid of it."

BEST COUNSEL AVAILABLE

The business officer has little excuse for not relating to his division the best in business practice. He has access to professional consultants and friends who are eager to contribute their counsel. I am often surprised at how little we use our specialists in business teaching and research, for example, at the same time that we are offering them for service to the business community.

Part of our failure to practice what we teach arises from our not recog-

nizing that education has become a business. Although we deal with contractors, vendors, unions and the public, we still do not think of ourselves as businessmen.

Because we have grown up in education, we do not always readily see where conventional business practice is applicable to educational organizations. We should seek professional assistance from the specialists and help from our friends in the business world. Everyone is eager to assist, when asked to do so. I believe every educational business office should have a panel of consultants called upon individually or as a group for appraisal of current organization and practice and for suggestions for improvement. An important by-product of such a procedure is the public relations value of involving the interest and enthusiasm of important people in the intimate workings of the institution.

The business officer, then, is a businessman. If his indispensable function is to be exercised with maximum effectiveness, he must be a good businessman, creatively using his staff and continually engaged in appraisal, with the best of specialist assistance, for management improvement.

The business officer of a university or school system is also an educator. This premise is given acquiescence by other professional people, including teachers. Not always does the premise get into action, however. In many places a psychological cleavage exists between teachers and members of the

*The business officer is referred to throughout this article in a generic sense. The reference is used to mean not one person, but the multiple functions that are assigned to the business office. This article is taken from a speech before the convention of the National Association of Educational Buyers, May 1951.

business staff, accompanied sometimes by academic snobbery, on the one hand, or a kind of condescension on the other.

No one objects to each person's regarding his kind of work as having unique importance in the scheme of things. Such bias is essential to the ego satisfactions of people and keeps them striving to make their own work important. Competition for recognition, however, should not be allowed to result in the giving of perquisites to one professional group that are denied to another. Such discrimination is not only illogical in terms of the premises set forth here but is devastating to the morale of the people affected. Different kinds of vacation privileges, differences in rates of pay for equally responsible work, differences in sick leave and retirement allowances should not exist among similarly classified people.

TREAT THEM AS PROFESSIONALS

Members of the professional personnel should be treated as such, whether they are assigned to the English department, the library, or the business office, and all should have the same benefits of employment. Moreover, the institution's facilities for recreation, food service, meetings on paid time, and such things should be available to *all* personnel on an equal basis, regardless of the professional status of the individual.

The business officer is a very irritating person to the academic personnel when he takes on the coloring of the businessman's condescension to things academic. When he gives the impression that he regards the professor as an impractical "brain truster" who is kept alive through the indulgence of practical people in the world, some of whom are operating the business office, he doesn't help create the atmosphere of professional cooperation and mutual respect so essential to teamwork in any large and complex organization. Some cashiers disburse the pay check as if the awarding of the check were a personal favor from the business office.

Even as an educator, the business officer should not presume to sit in judgment upon the educational ideas that come before him. Many of the institutional organizational upheavals that have involved business officers were in situations where the normal decisions of the office were given in a way that really determined educational policy. Of course, educational policy is always influenced by finance, but the form

that influence takes should be a group judgment of the educational staff, not the personal conclusion of the business officer.

At this point, the business officer has indeed a delicate rôle. He must insist that decisions involving finance or business procedure come within the institutionally adopted framework, but he must not render decisions on the basis of his judgment as to the educational validity of the proposal under consideration. Failure to observe this precept is a great source of justifiable resentment in educational organizations, is harmful to morale and is a deterrent to effective administrative teamwork.

The business officer, then, must be able to blend in himself the sympathies, understanding and aspirations of the professional educator and firm handling of the responsibilities of procedural controls of sound business practice, without acting as educational judge on the one hand or audit autocrat on the other.

This dual function of the business office can best be administered if the framework for decision has been subject to group discussion, appraisal and approval in the institution as a whole, through whatever machinery is available for the purpose, and has been adequately interpreted to the entire staff. Inadequate interpretation of business policies and practices is a common failure in educational organizations. The result is that when a staff member is thwarted by a policy he has never heard of, he gets the notion that it was created on the spot by the office as a special means of ruining his pet project. Multiply this instance by a thousand, and the climate for business operation is changed so drastically that its effectiveness is hampered.

When it comes to interpretation, however, the business officer again needs specialist help. The typical compendium of rules, regulations, procedures, policies and general information may be clear to the auditor, but to the average staff member it is about as useful as the unintelligible instructions that are given for the assembly of a new household gadget. Worse, the very encyclopedic appearance of these documents confirms the suspicion of the faculty member that the chief function of the business office is to manufacture red tape.

The publication of a dictionary or encyclopedia, then, is not the answer. A total program of communication

must be planned, including meetings, conferences, specialized publications for specialized purposes, and individual counseling. And the task of informing the staff is a continuous one throughout the year. The business officer who thinks his interpretation job is done when he issues his occasional statement of procedures and addresses the opening staff meetings will be subject to the continuing harassment of staff misunderstanding.

As a businessman and as an educator, the business officer's chief rôle is that of institutional expeditor. Red tape is an inevitable by-product of institutional management. In fulfilling the responsibilities previously outlined, it is necessary to set up rules and regulations, patterns of administration. No organization can survive without such regularization. We must always remember, however, that rules and regulations are made in order to get a job done and that no organizational pattern has yet been devised that can absorb all the problems with which an organization must deal. There must, therefore, be exceptions to regulations. The question must always be "How can we get the job done?" rather than assume that, because a given problem falls outside the framework of previous arrangements, nothing can be done about it.

ADMINISTRATOR'S CHIEF TASK

If organizations could be administered by rules and regulations alone, administrators would not be necessary. The clerical force could operate the institution. A chief task of the administrator is to know when to make an exception, under what conditions, and how to relate the exception to regular practice. If exceptions are made merely because of reasons of internal politics or for reasons of lazy administration, the results are devastating to morale and to efficiency. Rigid adherence to rules and regulations, on the other hand, is equally inhibitive of creative growth in the meeting of human problems.

The business officer is very often regarded by the faculty as a "Yes" and "No" man. He says "Yes" to things that fall neatly within the established routinized groove and says "No" to everything that falls outside the previously arranged scheme. I'm sure that the good business officer is a problem solver. He has an administrative responsibility to get a job done. A part of his task is to see to it that what is

done is done properly and in accord with good business practice but it is also part of his job to see to it that ideas for improvement or new achievement are handled in such a way that they are not bruised by the fact that they happen to be unprecedented.

The effective business officer will say to the professor, "What you ask is impossible under our regulations, but the idea you are dealing with obviously has unusual merit, and we will see how we can get the objective that you have in mind fulfilled, if you will be patient with some modifications in procedure that we may have to suggest to you." This approach is a creative one. It applies to the issue the judgment of the business officer where it is expert, but it does not prejudice the content or quality of the educational idea that is placed before it. If more business officers took this approach with faculty people, many of the cleavages that now exist would be minimized; more important, the work of the institution would be stimulated and kept growing.

As the chief institutional expediter, the business officer must see to it that the machinery of regulations is well oiled, that there are no broken parts or clogged wheels. He also must be the one to recognize first when an important task does not fit into the machine and be prepared to improvise some other solution. Again, this is a fine line that I am marking. Improvisation unrelated to administrative pattern can lead to chaos. Without improvisation appropriately and soundly applied, administration can be stultifying. It is the task of the business officer as much as any other one person to mark this line without submitting his institution to the results of his stepping off on either side of it.

The business officer is a key member of the administrative team. There are two concepts in this statement, one related to "key" and one to "member." He is a *member* of the administrative team and therefore not its chairman incognito. He must work as a member of the group, recognizing the separate administrative jurisdictions within the organization. At the same time, he must operate so that the influence of his institutionwide responsibilities is brought to bear upon the other administrative jurisdictions. His is the task of harmonizing realities with dreams, restrictions with aspirations, technics with promotion to the end that the institutional program shall grow and grow soundly.

As to sound growth, I believe the business officer has a special concern with institutional integrity.

When I make this statement most of you will at once think of integrity in terms of financial honesty and there is no more indispensable element in effective school administration than financial honesty. It is to the great credit of school administration across the country that examples of the violation of the code of financial honesty are so rare as to be almost unremembered.

In my definition of integrity, however, I would include more than finan-

tegrity is a premise upon which all the affairs of the institution are conducted.

Loose practices in admissions, false advertising for the recruitment of students, exploitation of students in work situations, unsatisfactory living conditions for students, the administration of contracts within the letter of the law but outside the spirit of sound human relations—all of these practices are in violation of basic institutional integrity. While some of them fall outside the direct administrative jurisdiction of the business officer, his stake in the institutional integrity is such that in all areas where he has administrative



The business officer must see that no malpractice exists in any area where he has administrative responsibility.

cial honesty. Integrity means honest interpretation of the institution's practices in relation to its stated purposes. It means fair dealing with staff members, students and the public.

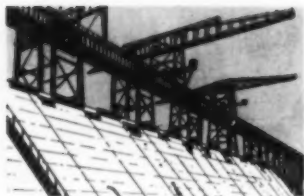
Institutions basically do not belong to the faculty or to the students or to the administrators of institutions, or even to boards of trustees. They belong to their constituencies. There is a public interest, therefore, in every school, be it privately managed or publicly operated.

The business officer must regard himself as a public trustee, and it is his responsibility to see to it that the affairs of the institution are so arranged that at all times representatives of the public might examine those arrangements and complete the examination with the feeling that unquestioned in-

responsibility he must see that no malpractice exists, and in areas in which he has no administrative authority he must call the malpractices to the attention of his chief officer.

The business officer is both a trustee and a servant, and the demands upon him are almost too great. He must operate calmly. (The ulcerous personality interferes with his job.) He must operate anonymously. (Headlines go to others.) He must operate deliberately, for to proceed otherwise makes for disorder, yet he must meet deadlines.

While this definition seems to point to a Superman, nowhere existent, it is amazing that there are so many prototypes filling the bill in so many places in our colleges, universities and school systems.



Let's not jeopardize our **TAX**

HARRY L. WELLS

Vice President
Northwestern University

THE TIME HAS ARRIVED WHEN THOSE engaged in the business management of colleges and universities must unite on a clear-cut conviction about the tax exemption as it applies to education. Then, having reached a unity, they must stand firmly against some very superficial thinking which is prompting suggestions emanating from the taxing authorities.

The attack on the tax exemption of institutions stems from two pressures. First, certain commercial organizations resented activities by colleges and universities, which, in a degree, competed with their own services. Particularly, they objected to this because the educational institution offered a subsidized service supported by tax exemption. The problem in this instance dealt largely with the dividing line between things that we must do in order to carry on education and things that we may do because we have the capacity, and the service will bring in certain financial support for other educational research and needs.

The line between educational research and commercial competition is fine indeed. This is illustrated by the fact that time and again commercial organizations that have criticized universities for entering certain fields are the very ones that have enticed the educators into that field. Recently Northwestern University was criticized quite severely because a certain professor in one of its departments agreed to make a survey into certain local school problems for a small community in the state of Illinois. He considered it an excellent opportunity to give his students a practical research

problem, while, at the same time, being compensated for their labor. There was an honest questioning in the minds of the city authorities as to the commercial organization's qualifications and, therefore, they approached specialists within the university. The commercial organization telephoned my office and vehemently denounced such action. In the course of the conversation the question was asked how it would handle certain phases of such a survey, for which it obviously could not qualify.

"Oh," came the reply, "we have used your Dr. X several times when we ran into problems that were beyond our experience, and we have even referred cities to him." So the very organization that criticized had used our research people when it was to their advantage; if they happened to compete, that was another matter.

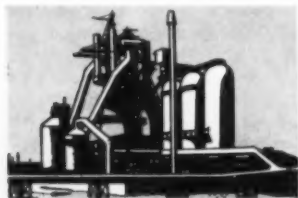
GIVE CREDIT WHERE IT IS DUE

Let us be fair in our thinking toward those organizations with which our various departments can compete. They are prepared to meet competition and welcome it. They are not prepared to accept competition that has an obvious advantage of subsidy. I think it is only fair to credit their representatives with a knowledge of the great contribution that our educational laboratories make to fundamental science and basic knowledge. They are equally cognizant of the necessity for research into practical problems as a factor in education. The obvious responsibility that rests upon our institutions is that our efforts should be confined to research for its

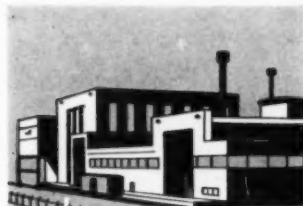
educational value. As a public institution we unquestionably have a responsibility to society, but this must be restrained to the concept of service and not financial temptations. We must use prudent judgment in all of our public relationships if we cherish our tax exemption.

The second source of pressure came from a somewhat panicky search for additional revenue to meet the tremendous spending programs of our national government. The searchers grabbed at statistics wherever they found them and drew conclusions which, in many cases, could have had no other purpose than to put the burden on the accused to prove their innocence. Such was the case with our educational institutions when they saw a total figure of approximately \$150,000,000 in the statements from 455 educational institutions accruing from sources that were seemingly loosely connected to the educational process. That these were gross figures which, if reduced by the expenses incidental to the operations which produced them would have resulted in a loss, and therefore no tax would be involved, did not deter the critics.

Research, wholly-owned properties, lease-backs and operative businesses all fell under scrutiny when they were directly or remotely connected with education. It is a fascinating but sobering disclosure to detect the inconsistency of many publicly employed minds. Educational institutions were entitled to exactly the same consideration that applied to any insurance company or other investing trust. Our tax exemption, per se, so long as it is sound and



EXEMPTION STATUS



we are permitted to enjoy it should not be suspected as a culprit. The entire problem resolves itself into the question of prudent investment and safeguarding of trust funds. Educational institutions have no greater or lesser right to follow sound investments than does any other institution with funds to invest. Our tax exemption encompasses all of the avenues available for any portfolio. Had the tax authorities followed that simple rule of classless treatment, our universities and colleges would have been spared tremendous drains upon their time and resources, which the federal government itself seems to regard with great alarm.

Truly, there was just one loophole which warranted investigation. Real estate, long-time leases, and leasebacks are normal and sound avenues of investment. They are subject to tax evasion manipulation regardless of the parties to the contract. For such abuses the tax authorities have adequate methods for detection and commensurate penalties.

The sudden expansion of charitable trusts, however, raised a new problem. In this situation the colleges and universities, which wrongly suffered the brunt of these attacks, were innocent participants. The charitable trust, as it exists today, was not conceived by the charities. It was designed by astute business minds who saw in it a method of contributing to charitable endeavor and, at the same time, preserving their enterprises against, in many cases, devastating effects of the inheritance tax. It was a bequest before death—a way of putting your

house in order and of continuing your business for your family and associates. It has not only been accepted by the taxing authorities but, in many instances, actually suggested by them. It is one of the soundest methods for the proper perpetuation of security and the distribution of wealth. I predict that it will be continued and, therefore, a sound and honest appraisal of its value is in order. Charities are the beneficiaries, but by no stretch of the imagination can they be criticized for accepting gifts from this source.

SHOULD THEY BE EXEMPTED?

There are two problems that can be honestly raised concerning charitable trusts. First, should they be exempted from corporate income taxes because they are perpetually dedicated to charity? The very argument for a separate entity weakens the defense of a corporate tax exemption. The entity is established because it makes possible an advantage to the present owners of the business. For that advantage alone the corporate tax is a just payment. Economically the temptation of the competitive advantage, emanating from the additional income accruing through corporate tax exemption, is too great to be permitted. No competing agency, operated for profit, has a right to publicly subsidize advantages. Charities, so dependent upon the fruits of free competition, should defend this basic economic premise.

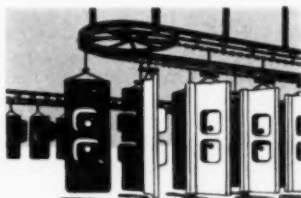
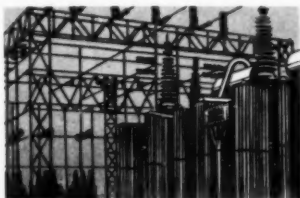
A second question arises when an educational institution assists in organizing a charitable trust by investing some of its own funds and borrowing

the additional capital needed either from the seller or some lending agency. This does not change the arguments put forth in the preceding paragraph, except to make them more persuasive. An advantage still accrues to the seller and, in addition, other assets of the university or college have, unknowingly, become collateral to ensure success for the venture. This is based upon the fact that no institution, having built an equity in an investment venture, will permit it to fail without a strenuous effort to protect the loss.

As a deterrent against this type of risk for trust funds, the corporate tax is justified. On the competitive side, charities have no just claim to an additional operating advantage such as results from corporate tax exemptions. The good will of benefactors is all important to our colleges and universities and, as a matter of prudent judgment, we should not ask for undue competitive rewards.

It seems to me that we have reached a strong majority verdict against the owning and operating by educational institutions of businesses that are not related to education, except as an investment medium. If, against that advice, such ventures are still undertaken, the opinion prevails that they are not entitled to the corporate tax exemption. It does not seem necessary or wise to jeopardize our tax exemption privilege by pressing for this right to additional advantages through the operation of competitive enterprises.

Regardless, however, of these conclusions, which seem to me to have crystallized very clearly, colleges and universities will at times through gifts



and bequests, own operating businesses. The taxing authorities are aware of this possibility and have intimated that a limited period of time, perhaps five years, should be granted for the selling of these enterprises. During this period the corporate tax exemption would be granted in recognition of our general tax exemption status and, also, to compensate the colleges and universities for the additional burden that suddenly falls upon them in connection with such gifts.

It is regrettable that we now find ourselves with a new set of problems growing out of the same determination to plug loopholes in federal tax collections. It is proposed to withhold at the source from all dividends, bond interest, and coupon payments a 20 per cent tax deduction. We have learned to live with and I think generally approve of the withholding tax principle. To apply it to income from investments seems, on the surface, equally sound. It creates certain problems for our educational institutions not only involving methods, records and expense, but deep concern with this incessant nibbling at our tax exempt status.

PLAN IS COMPLICATED

The plan provides that the withholding will be complete and that charities will be reimbursed by the government for their tax exempt share of such deductions. To avoid the delay in receiving our income they suggest that we can retain the money that we withhold for taxes and social security to the extent of our claim against the government's withholding on investments. This sounds simple and innocent, but remember the money we withhold is deposited frequently and therefore we shall be forced to make out many reports to recapture our 20 per cent deductions. It will be complicated and will end in utter confusion unless we reduce it to a far more workable program than is evident at the moment.

To place the burden of recovery upon colleges and universities will involve each of them in hundreds of controversies. Such items as the date of purchase, sale or ex-dividend and accrued interest to date of sale must be meticulously established. Our share of the tax arising from the ownership in open end investment trusts carries through to the tax deduction on each asset in the trust's portfolio. This applies also to merged trust funds in

banks where a charity is one of the beneficiaries.

Regardless of the method used in deducting taxes against an investment trust, it is difficult to attempt to identify a charity's interest. The machinery for the withholding may be so intolerable that it can jeopardize our tax exemption itself. We need to face this problem quickly and firmly.

The committee on taxation and fiscal reporting of the American Council on Education met in Washington last April 20 and reached a sound conclusion. The committee stated: "We feel that the impact of this program of withholding would be lessened to the greatest degree if we were permitted to file exemption certificates with corporations immediately upon the acquisition of stocks or bonds and thereby receive full remittance of dividends and interest payments. We are not unaware of the fact that this procedure would place additional burdens on many corporations. But after all, it becomes a question of who is going to assume additional burdens and who is best able to assume them. Corporations, if put to additional expense, could claim such items as business expense and hence deductible."

This is an encouraging approach but it still leaves unsolved all those cases in which dividends and interest payments pass through merged funds and investment trusts that may include mortgages, real estate, and many other forms of investments not subject to withholding taxes. Even if the deductions are made by corporations they cannot identify a charity that participates in a merged situation. There are perhaps compromises that will make the plan workable, as is evidenced by its practice in Canada. It is, however, leading us directly into a maze of reports and endless governmental auditing. The one simple solution would be to abolish all tax exemption, and there are minds that think in those terms. We must be fearless in the defense of our tax exemption rights.

My interest at present centers around the reaching of a sound philosophy toward education's right to tax exemption. In order to understand this feature of the educational program we must return to the very beginning of our country. Between 1620 and 1776 there grew up in the Colonies a completely new concept for the implementation of human freedom. It was built around the conviction that the human

being was created with a free mind and had the right to think, act, choose and go in the direction of its choice. The founders of this country set about to evolve social, political and economic machinery that would make such freedom possible. At the core of this concept they placed "religion, morality and education." Religion was left with the conscience of the individuals; morality was subjected to discipline and punishment, and education was made a basic concern of the state.

In the very first land-grant ordinance, one lot in every township was set aside for school purposes, and education was recognized as the only basis upon which a representative government could be fashioned. So entrenched was this conviction that the right to higher and higher education expanded under compulsory educational laws that now prevail in every state of the Union.

EDUCATION GETS SUPPORT

Thus, education became the mandatory factor in our country's growth, and the very wise provision was made that this activity must be carried out either by private endeavor or by state and federal support. Our concept of free enterprise carried over into the school system and our leaders recognized that the private educational institution had just as much claim to tax support as the state institution. Our tax exemption privilege emanates from this recognition, and our legislators are aware that if education is not furnished privately, it must be furnished by the state. Tax exemption for non-profit education services evolved not only as a right, but as shrewd foresight. It enabled the country to provide education at higher and higher levels long before states were financially equal to the burden. Out of it came our dual system of education, which is so expressive of our concept of freedom.

We should be of one mind whether we represent state schools or private ones, for tax exemption is valuable to each. Our efforts should be alert in defending our tax exemption right, and we should work diligently not only to sustain it but to expand it. We should not, however, jeopardize it by pressing our advantages beyond the critical point of wisdom and prudence.

From a paper presented at the 40th annual meeting of the Central Association of College and University Business Officers, April 1951.

Speeding up **REGISTRATION** by machine methods



Left: A clerk receipting student registration fee receipts. Below: Official receipt, which is filled out by student, then validated on machine, providing both protection and cash control.

JAIME O. VALERA
Assistant Dean, Institute of Accounts
Far Eastern University, Manila, Philippines

EDUCATION IS A GOING CONCERN in the Philippines. Just as it has in the United States, the growth of education in the Philippines has far outstripped the facilities for handling the greatly increased number of students who wish to take advantage of educational opportunity.

Our own Far Eastern University provides an excellent example of this. Founded as the Institute of Accountancy in 1928 by Dr. Nicanor Reyes, the school became the Far Eastern University in 1934, with an enrollment of 4000 students. The school had been expanded to embrace the Institutes of Arts, Law, Education and Technology, with an enrollment of approximately 9000 students, by the time the war came to us in 1941.

FAR EASTERN UNIVERSITY
Quezon Blvd., Manila, Philippines

THIS IS YOUR OFFICIAL RECEIPT

Student No. 142356 Print Student's Name DE LA REINA JOSE G
Last name First name Middle initial

Inst. of ACCOUNTS Cash ☐ Cash No. ☐
Money Order No. ☐ Installment ☒
For SEPTEMBER INSTALLMENT Satisfies ☐

P 35.00

F. E. U. receipt, receipt No., date, and amount paid are shown below

31223 SEP 15 58 35.00

Check your date and amount of payment registered by machine before leaving the cashier's window

NOT VALID IF NOT REGISTERED BY MACHINE

Cashier's Initial

FILL OUT IN TRIPLICATE

Upon reopening in 1945, only 5000 students were registered at the university. However, in the last five years we have seen an increase of more than 500 per cent, and more than 26,000 students have been crammed into the seven concrete buildings that occupy almost an entire block on Quezon Boulevard in the heart of Manila. Some 350 employes and 500 faculty members also share this space. The recent completion of two ultramodern buildings has eased the situation somewhat, but

handling the largest university enrollment in the Far East still presents many problems to the administration.

One of the most pressing of the problems caused by the rapid increase in students was the efficient handling of student registration payments and other fees. Although some of our institutes are on the semester plan, a large number of student payments and fees must be handled quarterly, and some students even pay monthly. Consequently, rush periods in the cash



Posting student registration fees to the student ledger.

department generally tend to be the rule rather than the exception.

Until a year ago we had been handling this matter of receipting payments on a triplicate form, and it was taking our clerks almost two minutes to fill out each of these forms in triplicate. With more than 26,000 students to register, at least twice a year, we needed a minimum of more than 400 teller hours to handle the job each time.

The accumulating delay in receipting payments also caused a delay in posting, and at these peak periods of registration our whole accounting operation was thrown into a chaotic state that barely seemed to subside before it started all over again. This was a

situation that was definitely not in keeping with the high standards of efficiency we recommend to our students in commerce, business administration, economics and similar courses taught at the university.

It became obvious that suitable mechanical accounting equipment must be acquired to cope efficiently and accurately with the huge volume of work required in receipting these student payments. Various manufacturers were contacted in search for a versatile machine that would do this job and also provide proper control over general receipts throughout the year. We finally arrived at a system using receipting machines, which cut our time in half, provided protection for every-

one involved in the transaction, and issued neat machine-printed receipts in the bargain. After a trial period we installed five of these validating and receipting machines, which make it possible to validate each triplicate receipt and make any necessary change transaction in from 30 seconds to a minute.

Of course, this saving of time, from almost two minutes required to handle each receipt manually, has greatly increased the over-all efficiency of the cash department. Positive protection also has been provided, along with speed and ease of balancing, smooth flow of teller items to the proof department, and much faster moving lines at the registration windows.

A blank form in triplicate is supplied to the student, who merely fills in his name, student number, address, amount of payment and department. The student then turns this form over to the teller who indexes the amount of the payment on the keyboard, drops the form into the easily accessible validating chute, and depresses the motor bar. The entire operation, including mechanically enforced repeat receipting and making any necessary change, is completed in less than a minute.

To complete the mechanization, we also installed a bookkeeping machine to handle posting of these payments to ledgers and other general accounting work. We have ordered an additional machine of the same type and feel that with this equipment we shall be adequately prepared to handle peak loads with speed and efficiency. We also believe that we shall be able to absorb a sizable increase in volume before any additional equipment will be required.

Such advantages as correct accounting for monies received during each day, automatic validation and numbering of receipts, locked-in audit tape showing every transaction in chronological order, automatic totaling of these receipts, quicker and more accurate handling of payments at registration time, and better control of general receipts throughout the year are a practical demonstration to students of the efficiency possible in business.

This is a concrete example to business educators of the old maxim, "Practice what you preach," in addition to being a practical solution to one of the major problems caused by the large enrollments in educational institutions today.



Far Eastern University, located in the heart of Manila.

DURING THE PAST SEVERAL MONTHS I have had occasion to learn something about labor unions. In fact, I have been compelled to conduct some research in that area. The complacency with which those who are in constant contact with union organizations view their intrusion upon a small college campus and, on the contrary, the reticence of college business officers to welcome such an intrusion with open minds and understanding hearts leads me to the conclusion that those who have been denied the privilege of investigating this matter may find some interest in our experience at Carleton College.

Organized labor has won for its adherents and for our people generally many benefits that otherwise could not have been obtained. Organized labor has stood between the working people and those who have sought to exploit them. It has become one of the most potent factors in our national life. Yet it seemed incongruous that some of our maintenance staff should seek to inject the formality of union organization into Carleton, a small liberal arts college organized not for profit, operating at a loss year after year—a campus situated in a community almost devoid of organized labor. Nevertheless, last fall without previous intimation we suddenly were made aware that Building Service Employees, International Union, Local No. 328, had been organized on our campus and granted a charter by the American Federation of Labor.

About two years ago a few members of the maintenance staff had called a meeting of employees attended by representatives of unions from the Twin Cities. Those attending were asked to state their grievances. No grievances were adduced. On the contrary, the employees praised the favorable treatment they had received. Their compensation was equal or better than that paid for similar work in the community. As a result of the favorable testimony given at the meeting, the union agents counseled against organization.

From a paper presented at the meeting of the Central Association of College and University Business Officers, Purdue University, April 1951.



The State of

THE UNION

BRUCE POLLOCK

Treasurer and Business Manager
Carleton College, Northfield, Minn.

Last August the union zealots arranged a meeting of employees known to be in favor of a union, or at least not actively opposed. At this and subsequent meetings, the organization was perfected but was not disclosed for several weeks while an attempt was made to fill the roster. When we heard

of it, we sought advice from personnel managers in industry and at the University of Minnesota, as well as from the state labor conciliator.

On November 1 a letter was sent to each employee, setting out in detail conditions of employment and informing him that neither the union nor

employer could influence him to join or refrain from joining by intimidation, and also that the college, unlike business or industry, could not adjust its prices to offset fluctuating costs.

On November 3 a meeting was held, attended by the president, superintendent of buildings, and treasurer of the college, and the president, vice president, secretary-treasurer, and one trustee of the union. The purpose was to ascertain the grievances that had given rise to the union. Some employees were unhappy because a raise had not been made effective July 1. I had recommended an increase at that time but it could not be acted upon until September, and by then our hands were tied, inasmuch as it would have been unfair labor practice to put it into effect. The officers of the union requested that all employees be represented by the union in collective bargaining with the administration.

On November 8 a meeting of all employees was called for the purpose of dispelling misunderstanding among them in regard to their right to refuse to join the union, and to inform them of the effect on the individual who refused to join should the union be recognized. The climax of this meeting came when a venerable woman employee asked the chief proponent of the union, "Just what can the union do for me?" to which he replied, "It is not a question of what the union can do for you, but what you can do for the union."

GRANTED WAGE INCREASE

On November 27 an announcement was made in writing to each employee that a wage increase of 7½ per cent had been made effective November 1, to which would be added on January 1, 1½ per cent for the employee's share of the social security tax.

At the request of the union, the state labor conciliator ordered a pay-roll hearing on January 23. The hearing was held by a representative of the state office and attended by officers of the college and a labor relations specialist retained by the college, and by officers and trustees of the union, a union agent, and by two employees in individual capacity. The result was that administrative and clerical employees, about 45 in number, originally included in the plan by the union organizers were declared ineligible.

The labor conciliator ordered an election on February 9 to determine whether the union should be the sole

bargaining agent. On February 6 a letter was sent to eligible employees emphasizing the importance of the election to the individual, and the fact that it was a democratic process—using the term in its original denotation—the ballot being secret, so that even though they had signed union cards, they were not compelled to vote in favor of it. They were told that the decision would rest on a majority of those actually voting, not a majority of those eligible.

A meeting of all eligible employees was called for February 8, at which time these points were discussed, and the union proponents were given an opportunity to state their case. The election was supervised by three representatives from the state labor office. The score was 67 in favor of the union, 65 against it. The administration challenged three votes as being cast by supervisors.

SURCEASE FOR ANOTHER YEAR

A second pay-roll hearing was ordered for February 23, at which one challenge was upheld and two were disallowed. A second election was ordered for March 14. The result was 66 in favor of the union, 70 against it. By this small margin we were granted surcease for another year.

From this experience we learned about unions, although our knowledge probably does not rise above the elementary level. We learned the handicap of management—"You cannot promise and you cannot threaten." We learned that lack of communication with the staff—telling them what you have done for them, what you are doing, and what you hope to accomplish in the future—is the greatest sin of management. We learned you cannot sit in an office and keep in touch personally with the maids who clean the rooms and the janitors who sweep the halls and the men who cut the grass or shovel the snow. We learned that no matter how important are the matters of vast moment on your desk, they are not as vital as continuance of a close personal relationship with those who work for the college.

Of more immediate consequence we learned that you can attempt to influence employees not to join the union, or if they have joined, not to vote for its recognition, but in doing so "you cannot promise and you cannot threaten." You can expatiate upon the benefits of their present situation and, in general, on the disadvantages of unionism. You can tell them if repre-

sented by a union, they will no longer receive individual consideration. Just how far you can go in talking to employees is probably a matter of experimentation.

On the other hand, the union is bound by the same restrictions, but in practice its representatives have all the advantage. They can obtain without charge the best labor counsel, whereas the employer must retain legal or management counsel at no inconsiderable fees. During the campaign for union recognition, maneuvering by an employer is noticeable and traceable whereas union people can attempt to influence your employees while on the job, and, in spite of all rules against it, it will be difficult to prevent such practice.

We were told, and I believe it to be true, that you can live in comparative peace and happiness with unions, and that condition will have some real advantages both from the standpoint of the employees and the management. It is true that unreasonable demands may be made, but such demands may force improvement of working conditions and increase in wages which should have been put into effect long before.

THE SAME OLD FRIENDS

If a union is successful in gaining recognition on your campus, you will transact personnel business through the union and dispense with many individual considerations, thereby saving your strength for other matters. After the union is recognized and your wounds are healed, you will realize that these union men are your same old friends who have not been changed by the alchemy of unionism, and tolerance of their aims and ambitions, which may be divergent from those of the college, will eventually restore unification of purpose.

However, as Fred Ambrose pointed out at our meeting in Chicago four years ago, the employee in a unionized staff transfers his first loyalty from the college to the union, and all improvements in working conditions thereafter are attributed to the activities of the union, regardless of what the college may have striven to do for its working people; so maybe it is easier to remove causes for grievance before some enterprising organizer capitalizes upon them. It costs no more to increase wages and shorten hours on your own initiative than it does under duress of a union and, besides, it is more fun to do it yourself.



OFFICE OF STUDENT NEWSPAPER

A guide for the operation of

STUDENT PUBLICATIONS

DARIO POLITELLA

Assistant Professor of Journalism
Kent State University, Kent, Ohio

WHAT ARE THE ROLES OF THE UNIVERSITY administrator and the student in the production of a student publication?

The students, faculty and administration of Kent State University have collaborated in attempting to solve the problem of advising and operating student publications. Their effort has resulted in a 44 page booklet, "Standard Operating Procedure for Student Publications."

Judging from the number of queries received from teachers and administrators from both the high school and college levels, a blueprint for student publications is of importance in academic thinking today.

The idea for the handbook was a result of growing confusion on the Kent campus as to what constitute the functions of student publications, what are the detailed duties of the staffers responsible for the publications, and what part the university administration plays in such productions.

The attempt was made to pattern student publication operations on tried

and proved commercial technics. The student daily newspaper operates on a yearly budget of \$20,000. The yearbook costs total \$25,000. Funds for both operations at Kent State University are allocated from student fees by a student-faculty allocations committee.

The first thing the handbook does, then, is to place responsibility for overall and specific functions. Authority for policy and production decisions is placed in a student-faculty publications policy committee, which acts as "institutional publisher" for the daily news-

paper, yearbook, freshman handbook, and student directory.

The committee acts as representative of the students, as well as of the president of the university. Its direct supervisory powers are delegated to a member of the faculty who is appointed by the president as adviser to student publications. The adviser is a permanent member of the eight-man committee. Other members of the committee are appointed by the president. In the case of the four students, selection for committee posts is made by the student council upon the recommendation of

the chairman of the school of journalism, who is also chairman of the student-faculty publications policy committee.

Upon the suggestion of George A. Bowman, president of the university, a separate committee was appointed this year by the chairman of the school of journalism to explore the need for a definition of the basic policies for the daily newspaper operation. The committee, again, was made up of students, faculty and administrators. The result of a six-months' study was a report which is included in the handbook and which discusses the policy responsibilities of the daily newspaper in terms of freedom of the press, truthfulness, fairness, responsibility and accuracy.

The section on "fairness," for example, indicates the tone of the report. It provides that "facts that could be discreditable to the university or to any student or staff members should be used only when they are essential to the accurate reporting of a significant story."

LIST PRIMARY DUTIES

The S.O.P., intended as a working guide for the publications staffs, defines the student-faculty publications policy committee. Listed as its primary duties are the following:

1. To receive applications for positions of editor and business manager of all university student publications and recommend their selections to the university president for approval.
2. To receive applications for all other salaried positions of university publications, such approval being final.
3. To establish and be responsible for all student publications policies and activities.
4. To receive for proper action recommendations from the editors and business managers, through the adviser to student publications, for all staff service awards.
5. To receive for proper action all recommendations from the adviser to student publications for merit awards to student journalists.

The committee acts in an advisory capacity to the student government and to the university president in all matters pertaining to student publications.

The position of the administration is further clarified in a section of the constitution and by-laws of the *Kent Stater* organization. The *Kent Stater* is the daily newspaper.

In defining the duties of the adviser

to student publications, the constitution provides:

"(He) shall be a member of the university faculty. He shall represent the general journalistic interests of the entire student body and of the university and shall have the rôle of 'representative of the institutional publisher' on an advisory basis. 'Institutional publisher' is intended to mean the student-faculty publications policy committee, of which the adviser shall be a permanent member. The main function of the adviser shall be to assist the staff in meeting the best standards of journalism by providing professional guidance and technical advice on such matters as newspaper makeup, how to write news stories and headlines, and how to gather and edit news that will be of interest to all readers because of its reliability, informational value, and consequence to them."

The adviser's specific duties are listed as follows:

1. Provide a critical and education service to the editorial board and staff.
2. Settle disagreements between the editor and managing editor or between the business and editorial staffs.
3. Suggest policies, the acceptance of which shall be up to the responsible editors and staff.
4. Aid in planning the news coverage of the newspaper.
5. Assist in keeping permanent records to aid future *Stater* staffs.
6. Provide liaison with the faculty and administration.
7. Be the final authority on interpretations of the constitution for any matters not covered or made clear by the constitution.

Other provisions are made for the supervision by the adviser of the business of the *Stater*.

The constitution also stresses the responsibility of the individual student to the newspaper and to the university. Much is made of the exercise of mature judgment, with proper guidance, by the student journalist. Because, with a few exceptions, all editors and staff members are professional journalism majors, the underlying educational philosophy is the belief that it is an injustice to the student to lead him through the valleys and shadows of neopractical training, only to dump him into the darker abyss of professional life where he must make his own way. However, during this training the student has a definite, responsible obligation to his publisher.

The general pattern laid out in the foregoing examples of the daily newspaper production is followed in the other publication for which guide rules are laid out in the manual.

What part does the student play in all this? His is the major consideration given in the handbook. In great detail, specific duties of every job on the publications are listed. The object was to define the part each student must play in order to lessen the confusion arising four times each year when new staffs for the newspaper, especially, take on the responsibilities of publication.

The experience of the university has been that the yearbook, the most expensive student publication operation on campus, has offered the greatest problems. These arise from a generally lackadaisical attitude by student editors in meeting deadlines.

Rulings in the guidebook fix the responsibility of the editors, business managers, and art and editorial associates. Deadlines are listed for each phase of production. To lend emphasis to the importance of deadlines, the editors agree to permit the publications policy committee to withhold 10 per cent of their yearly salaries pending the meeting of the distribution deadline. The editors are not penalized for contingencies beyond their control, such as failure of the printer or engraver to make good their contracts.

COMPLETE HANDBOOK

The S.O.P. is a complete handbook. Organization charts show the flow of responsibility. A style section is included for use of the daily newspaper staff, plus a complete headline schedule. All awards are described for which the students participating in publications work are eligible. Also listed are the bases for award and the methods of selection.

How is the S.O.P. working? Since the project is new, no real evaluation of it can be made. It has real promise, however, if favorable and enthusiastic reception of the idea of the S.O.P. can be judged. The S.O.P. is a combined effort. Most of the ideas contained in it are those offered by the student journalists themselves. The university expects minor changes to be made before the handbook can be considered a final guide.

But both students and administrators feel that a step in the right direction has been taken to ensure a profitable, progressive and responsible approach to student publications.



EARLE WASHBURN

Director of Accounts
New York University

RECENTLY COLLEGE AND UNIVERSITY BUSINESS published an article by Ralph S. Johns* of the Chicago office of Messrs. Haskins & Sells, certified public accountants, in which he introduced several problems encountered in the accounting for nonprofit institutions in general and colleges and universities in particular.

One of these problems relates to the amortization of bond premiums. This is a matter of financial policy rather than one of accounting, and, in the end analysis, it is not too difficult for those familiar with the various technical procedures to determine the amortization to be annually recognized.

The basic philosophy of this policy proceeds from the premise that the primary object of the donor of the fund is the maintenance of principal at the expense of income. I have never been completely convinced that this interpretation is entirely fair.

When an individual establishes an endowment, it usually is for some object that is known to him at the time, together with the person whose work is likely to benefit by the income from the endowment. To any extent that the income from the endowment may be reduced, the object for which the endowment was established fails to be accomplished. The assessment against income of a sum for the amortization of a premium on the investment of the principal of a fund therefore should not be considered. Furthermore, the

fact that a bond is bought at a premium does not preclude the possibility that it will be sold at the same or a greater premium. One good investment policy that would remove this problem is to refrain from buying premium bonds.

RECALLS TRANSACTION

Within my experience there comes to mind a bond issue that resulted from the conversion, par for par, of guaranteed stock into a 100 year bond carrying the same interest as the dividend paid on the stock. The stock was bought at a 60 point premium, that is, \$100 face value cost \$160. This meant that bonds were at a 60 point premium when taken on the books. The university accountants immediately began pressing for the amortization of this 60 point premium over a 100 year period. The recommendation was not adopted and eventually the bonds were sold at a 120 point premium. On the basis of 100 years the annual amortization would have been 60 cents for each \$100 of principal. The annual cash return was \$8 for each \$100 of principal.

There are further considerations in favor of omitting the amortization of bond premiums. They may be mentioned briefly as follows:

1. The premium presumably is paid for the protection of the principal and therefore the amortization of premium should be charged to principal.

2. The premium does not ensure a

greater return of interest but rather the reverse.

3. It may be safely assumed that loss of premium in cases in which a bond is held until maturity will be more than matched by profit taken elsewhere in the investment portfolio.

4. The income from the investment of the endowment funds is in cash and presumably is available for the budget. It is rare indeed that any institution has more than enough to support its educational program. Therefore, it would seem that any policy of management that would be likely to decrease this available income should be viewed with disfavor, and it follows that the method of assessing a premium against the principal is the most equitable since it prevents the injustice of charging income with a loss that may never be incurred and yields for the budget the largest possible income.

It often has occurred to me that the amortization of premiums against the income account is an effort on the part of management to escape the consequences of its own acts, and that the purchase of long-term bonds at a high premium is purely a latent attempt to avoid the care and responsibility that would otherwise fall upon it.

This is a minority position and is contrary to the long established practice in most jurisdictions and also to a multitude of court decisions. But the application of the majority opinion works a hardship and therefore is manifestly inequitable.

*March 1951.

Virginia Tech honors its war heroes with a

"PEACE" MEMORIAL

consisting of formal court and chapel

CONSTRUCTION ON VIRGINIA TECH'S \$400,000 War Memorial has begun. This shrine—which could, as appropriately, be called a *peace* memorial—was designed by the architectural firm of Harbeson, Hough, Livingston and Larson of Philadelphia.

Virginia Polytechnic Institute is located in Blacksburg, 2100 feet above sea level in the Allegheny Mountains. It is Virginia's land-grant college, and is one of the eight colleges in the United States that are classified by the Department of Defense as Class MC, or essentially military. Its student body ranges between the postwar peak of more than 5500 and the present enrollment of about 3200.

The alumni of the institution are financing the memorial, a tribute to the more than 7500 former students who served in the armed forces during World War II, a cenotaph to the 518 who made the supreme sacrifice. The structure has been conceived to express the best aspects of the training, character and performance believed to have been operative in those to whom the memorial is dedicated, and more positively, to provide a means of perpetuating these traits in future students.

The memorial defines itself into two phases, or levels, while never losing its unity. The upper level, or memorial court, assumes the job of expressing the best traits of the men who served. On either side of the court rise four massive pylons of Indiana limestone. On the eastern face of each of these pylons will be mounted original sculpture that will depict aspects of training, character or performance. These heroic figures have been developed to half-scale models and are ready for translation into buff limestone. The titles of these bold-relief statues tell their story and set the theme of the memorial court. The double figured

MARCUS L. OLIVER

Assistant Alumni Secretary
Virginia Polytechnic Institute

piece on the first pylon on the right, as one enters the court, is titled UT PROSIM (motto of the college) and shows Alma Mater striving to develop character in her student by teaching Brotherhood (a double figured sculpture on the opposing pylon), Duty, Honor and Loyalty. These traits are essential to Leadership; leadership means Service, and service requires Sacrifice.

The pylon figures were created by two of the nation's promising sculptors, Charles Rudy (Ut Prosim, Duty, Loyalty and Service) of Ottsville, Pa., and Henry Kreis (Brotherhood, Honor, Leadership and Sacrifice) of Essex, Conn.

MARBLE CENOTAPH

Wider at its entrance than at its terminus by about 20 feet, the open court narrows by the in-setting of each successive pair of pylons. Slightly forward of the last two pylons and centered on the court will be a marble cenotaph—a small monument in memory of persons buried elsewhere. The names of those who died will be carved on the inner faces of the eight pylons.

The pylons that rise above the memorial court are continuous from the ground level, where they serve as buttresses for the second phase, or lower level, of the memorial—a chapel. The symbolism in this construction is that all the human attributes that are sculpturally depicted on the pylons at court level are based on religion. Except for the pylons and entrance way, which will be of Indiana limestone, the exterior of the memorial will be done in native limestone. The slate-gray to burnt umber tones of the local

stone will provide a rich contrast to the buff color of the Indiana material.

The chapel is nonsectarian in design and will be usable by groups of all faiths by the employment of movable symbolic equipment, which will be provided. It will seat from 350 to 450 persons, depending on the arrangement of the cathedral chairs.

Only two permanent fixtures will be present. The chancel wall will be treated sculpturally in Indiana limestone. Donald DeLue, New York City, has just completed the half-scale model. The chancel panel is representative of man's recognition of his relationship with his Creator. The other fixture will be a stone altar.

Virtually untreated buff limestone will form the interior wall surface of the rest of the room. Alcoves on either side of the vestibule will serve as a place for the safekeeping of certain mementos and historical records; they may be used as waiting rooms at weddings and other ceremonies.

Electronic English and Flemish carillons are to be installed in the tower of near-by Burruss Hall (the tallest building on the campus) with a console located in the memorial chapel. There will be another console in the 3000 seat auditorium of Burruss Hall. Music that could not appropriately emanate from the chapel can be played on the console in the auditorium. Regularly scheduled music will be played on the English bells, and periodic carillon concerts will be played on the Flemish bells.

The memorial now being constructed should be a happy solution to the problems incident to most memorials: It should never lose its memorial characteristics, as do gymnasiums, libraries and classroom buildings; it is a positive contribution to the campus, seeking not only to commemorate something that was good

HONOR



SACRIFICE

but providing a means for the perpetuation of the thing commemorated, and without being purely utilitarian, it will be useful.

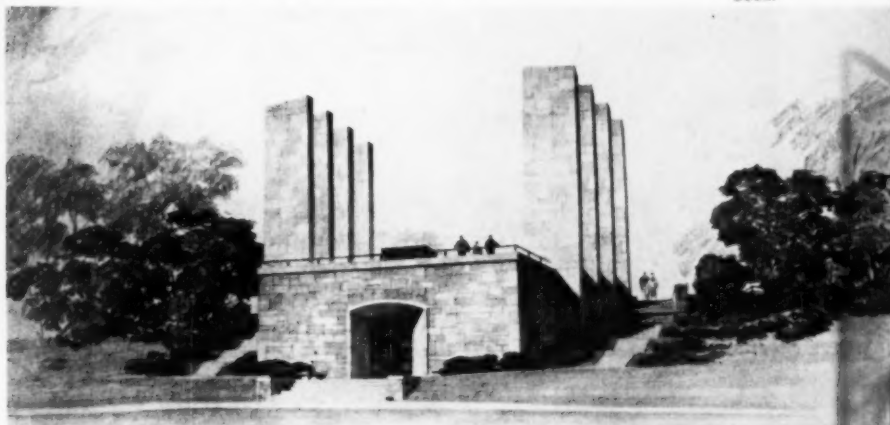
Since it will never be locked, the chapel always will be available for students, faculty and friends to use for quiet meditation or private worship. Doubtless, student church groups will want to hold services there on various occasions. The chapel will make an ideal setting for formal initia-

tion ceremonies of the several honorary fraternities; students will want to be married there, and alumni may wish to be buried from it.

The memorial court will be ideal for evening vespers, especially during the summer months when many youth groups gather for conferences on the campus. The first orientation of new students concerning the traditions and history of the college could well be held in the new memorial building.

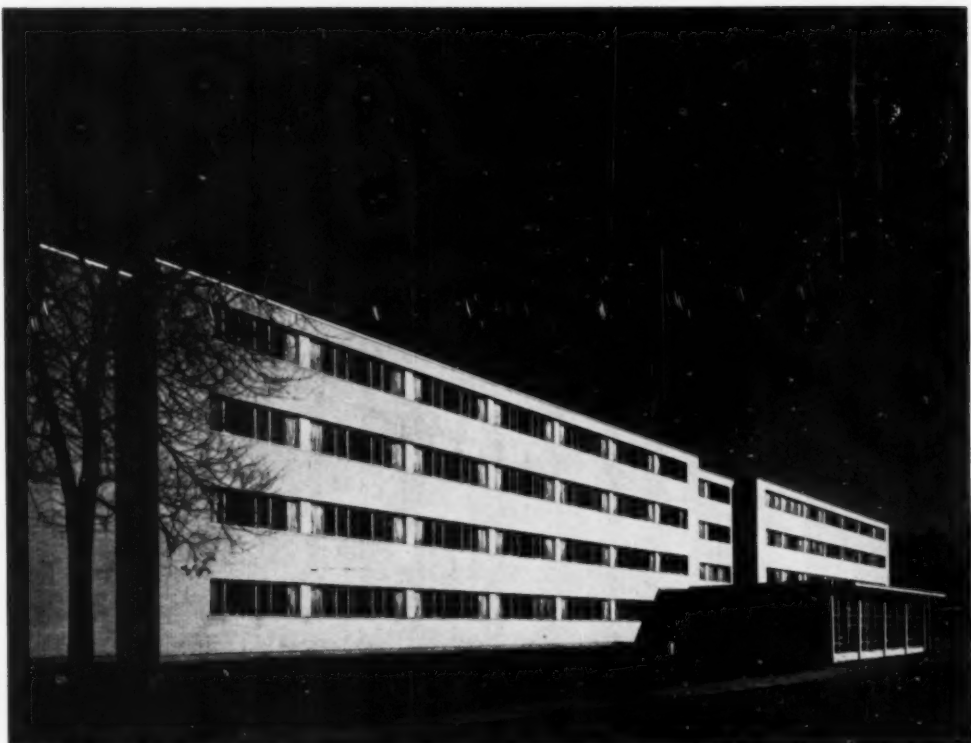
Memorial Court is a monument to the service and sacrifice of Virginia Tech's former students in World War II. Each of the eight massive pylons will carry sculpture symbolic of the noble traits to be instilled in students. The lower level is a chapel, the doors of which will remain unlocked.

COURT



CHAPEL





Photos by Hedrich-Blessing

MEN'S RESIDENCE HALL

built in record time and at low cost

BUILT AT AN EXTREMELY LOW COST in record time, the recently completed 195 man residence hall on the secluded campus of McCormick Theological Seminary in Chicago represents a positive and highly satisfying answer to the questions of many who (in the light of previous experience and knowing the limitations of cost and time for completion) said "it couldn't be done."

More important, however, it is a striking example of how detailed and careful planning can materially reduce costs for new construction of college and university buildings. It is another demonstration, moreover, that a building of contemporary design can gracefully take its place in a setting of older

structures of varied traditional architectural styles.

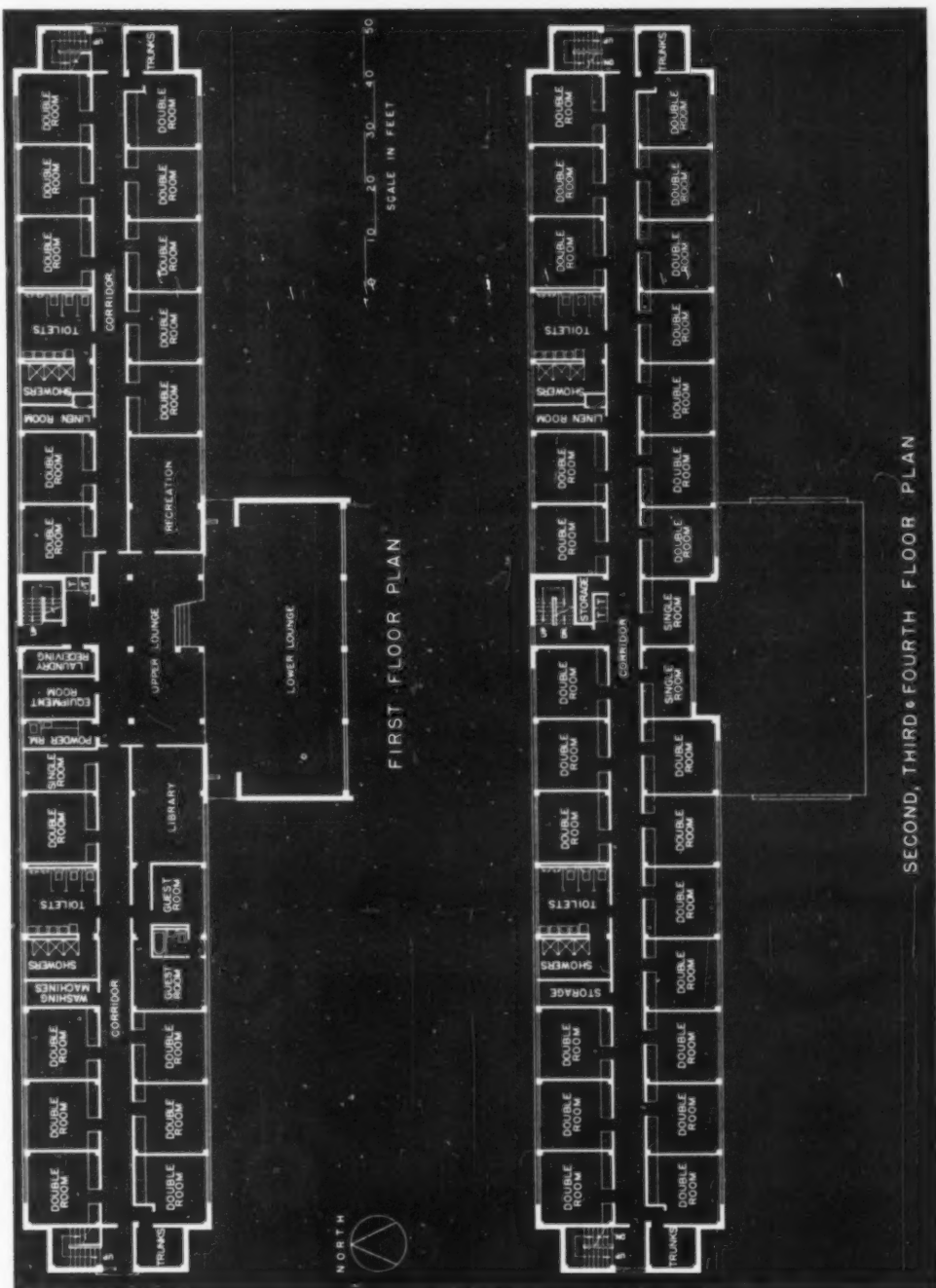
This new building, made ready for student occupancy in September 1950, only six months after the architects were authorized to prepare the drawings and specifications, was built at a construction cost of \$312,000. This was the equivalent of \$8.92 per square foot, or \$1600 per student. Architects' fees and the cost of furniture, much of which was specially designed by the architects, totaled an additional cost per student of \$360. These figures have greater significance when viewed

in the light of the substantial quality of the construction and the adequacy of the student rooms.

The structural framework, for example, is of reinforced concrete. The typical double room occupies a space approximately 14 feet square. Four stories high, the building contains 94 double rooms and seven single rooms and has on the ground floor a "reading room and library," a recreation room, and a large lounge 55 feet long and more than 40 feet wide. No dining facilities were provided, the building being only a short distance from the

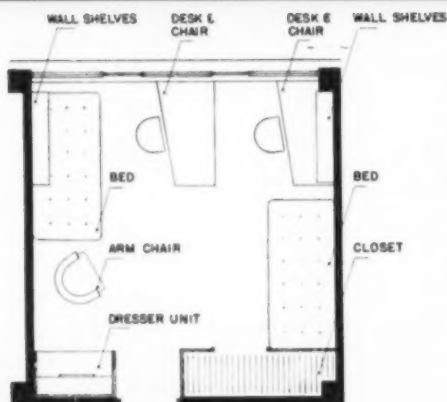
EDWARD M. TOURTELOT Jr.

Mittelbush and Tourtelot, Architects
Chicago



NEW DORMITORY AT McCORMICK THEOLOGICAL SEMINARY, CHICAGO.

Plans of the first, second, third and fourth floors of the recently completed 195 man residence hall on the campus of McCormick Theological Seminary in Chicago. The building contains 94 double rooms and seven single rooms. It was built at a construction cost of \$312,000, the equivalent of \$1600 per student.



TYPICAL DOUBLE ROOM.

Each double room occupies an area of about 190 square feet. Fixed furniture is carefully spaced and arranged to provide the maximum of open area for dressing and living functions and also to enhance the feeling of breadth.

commons building which provides for this function.

There are two luggage storage rooms in each story, adjacent to the stairways. Two shower rooms and two toilet rooms serve each floor, as the building is approximately 240 feet long. There is a receiving room for students' laundry and dry cleaning, and a dumb-waiter is provided to service the linen rooms on the upper floors. A ground floor room has been equipped for installation of washing machines. Heat is obtained from the central boiler plant on the campus.

In establishing the basic design, the architects were confronted with three problems: (1) the not unusual limitation of funds; (2) a rigid completion goal for September occupancy, and (3) the frequently encountered problem of reconciling the introduction of an economically and structurally contemporary building into a setting of varied architectural styles.

Problems 1 and 2 were met by careful selection of materials and thorough organization of the construction procedure during the design stage and by minutely detailed planning of each component part, beginning with the typical student room and its furniture arrangement and the integration of this typical room into the most economical structural framing pattern. Every structural unit, including the very blocks of which partitions were built, and the spacing from wall to wall, column to column, and floor to floor, was carefully studied to eliminate any unnecessary cutting or waste of material.

The arrangement of mechanical equipment and of heating and plumbing lines was likewise methodically analyzed to eliminate any wasteful routing or unnecessary fittings, and at the same time to avoid exposing plumbing and heating piping, which ordinarily is difficult to conceal soundly and economically in a system employing block construction for partitions and slab construction for ceilings.

Simplicity of line and mass, the inherently natural repetitive use of the necessary functional elements, and avoidance of elaboration, together with careful selection of the color and texture of materials, give the building a serenity and repose that contributed to a gratifying answer to Problem 3.

The individual rooms are adequately spacious, each occupying an area of about 190 square feet, with fixed furniture carefully spaced and ar-



ranged to provide the maximum of open area for dressing and living functions and to enhance the feeling of breadth. Each student has a desk at right angles to the window, which provides daylight from the left side and a broad view of the pleasant greensward of the campus. Draw draperies are provided to curtain the continuous window, which has its sill just above desk height. Single beds of the studio type, arranged for box bedspreads, are placed at opposite sides of the room and serve as additional seating during the day.

The corridor wall is completely devoted to a double dresser unit and a double closet which, together with the entrance door, are finished in natural red birch; this provides a pleasing contrast to the masonry textured side walls and the continuous window wall opposite. This placement of closet

and built-in dressers further tends to muffle and "screen out" corridor noises.

The dresser has two tiers of drawers and a sliding mirror arranged to give access to storage space behind it; there is an additional storage compartment above. Wall-hung bookshelves at each side of the room save floor space and add a decorative accent to the walls.

ALTERNATIVE COLOR SCHEMES

Color has been used freely, with several alternative schemes for the individual rooms, to create a homelike and pleasant atmosphere. By careful control, the architects were able to

The ground floor lounge, with its continuous windows on the south, is oriented to avoid east and west sun and to provide better light for reading.

achieve a perfect match between the factory finish of the furniture and the interior wood trim and cabinets, ordinarily a difficult problem. Continuous tack strips were installed to afford the students a convenient means of hanging pictures and wall decorations.

It is interesting to note that it was possible to achieve economy and still provide individual student rooms that have pleasing proportions. These rooms have breadth along the exterior wall and avoid excessive depth, a change from the narrow, deep proportioned rooms that many regard as a factor in economical design. All rooms face either north or south, unpleasant daylighting from the low penetrating east or west sun being eliminated thereby. At the same time, this orientation lent itself well to a simple and uniform system of heat control, which employs two circuits on distinct tem-



perature influence zones. The rooms are heated by continuous radiation along the exterior walls.

The lounge is likewise oriented to avoid east and west sun and to provide better light for reading and recreation. With its continuous windows on the south the lounge commands a broad view of a large pleasant quadrangle, flanked by the existing limestone commons and gymnasium buildings.

The type of construction and the materials used in the building were

and give the wall an attractive texture. Here also the need for plaster was eliminated, and these partition walls were painted in deep tone colors to add a feeling of warmth.

Stairways are of concrete with metal pipe railings. Rubber tile, for quiet and comfort, was used for the finished floors in the individual rooms above the ground floor, and a tough, long-wearing and resilient type of floor covering contributes to quiet in the corridors. Doors to student rooms are solid-core birch, of flush design, with

posure. By means of dampers, a moderate amount of individual room control is made possible for the occupants.

The continuous radiation design also contributes to economy of first cost, eliminates exposed piping and many fittings and valves, conserves usable floor space, and at the same time produces completely uniform heating. Steam from the central heating plant is converted to hot water in a heat exchanger located on the first floor in the equipment room near the center of the building. With the design method used, the hot water system for this building proved less expensive and more satisfactory than any system designed to utilize the available steam directly.

By careful design of girders and slabs the floor-to-floor height was reduced, and stairs were so designed that ascent to the fourth floor is so easy that observers are surprised to find that the top story is much easier to reach than the third floor in the more conventionally designed structure. This was another of the many factors that made an important contribution to the low unit cost.

Ease and low cost of maintenance were given full consideration in the design. Aluminum copings and aluminum sills in 14 foot continuous lengths are examples. The lightly stained finish on all woodwork and deep tone colors on walls will show a minimum of soil and thereby reduce the need for frequent washing or decorating. Oil-base wall paint was used throughout for permanence, washability and recoating qualities. The one-piece, continuous-roll type of corridor floor covering used has a minimum of cemented joints, has low initial cost, and is extremely long wearing, quiet and easy to maintain.

The finishes used for built-in dressers, desks and chairs are guaranteed by the fabricator to withstand the effects of water and such destructive liquids as iodine and stain removers. Windows are arranged so they can be washed from the interior.

The gray face brick used has a low absorption rate and will wash and clean easily when the necessity arises. It has the additional virtue of blending with the general color value of the near-by older limestone faced structures.

The example of modern architecture frees the seminary in future years from any compulsion to perpetuate the more expensive traditional styles.



A view of the upper level of the lounge, opposite the large windows.

selected for permanence. The supporting framework of columns, girders and slabs is of reinforced concrete, the ultimate in fireproof construction. Exterior walls are faced on the outer surface with a smooth gray Pennsylvania face brick and are of so-called cavity construction, providing an insulating air space. The structural floor system is a concrete flat slab design, eliminating the necessity for a plastered ceiling. Concrete forms for the ceiling construction were for this reason made of plastic-coated plywood, to provide smooth surfaces.

Smooth-face lightweight concrete blocks were used for interior partitions of student rooms; these provide a certain amount of acoustical correction

integral metal buck and trim. Continuous windows are crank-operated steel casements with bronze wire screens.

The combination of economy and completely satisfactory operation also was achieved in the heating system. A continuous series of thin wall convectors rings the perimeter of each floor, measuring out a carefully proportioned amount of hot water heating. Its continuous coverage of the exterior wall beneath the windows blankets the cold of the glass and stops objectionable drafts. An outdoor thermostat for each of the two principal exposure zones (north and south) sets the zone water temperature according to weather conditions affecting that particular ex-



B & G BUILDING *is a morale raiser*

SAM F. BREWSTER

Director, Department of Buildings and Grounds
Alabama Polytechnic Institute

ON OCT. 15, 1950, THE DEPARTMENT of buildings and grounds at Alabama Polytechnic Institute vacated an assortment of unsuited offices, shops and warehouses and moved into new quarters planned for its exclusive use. After working for years in inadequate quarters, it was not surprising that the morale of buildings and grounds personnel soared as soon as the move was completed.

The project was planned so that eventually a paved court, size 132 by 139 feet, would be completely enclosed by the building except for the main truck entrance. Three sides have been enclosed by the building and the fourth side is presently enclosed by a 7 foot chain link fence. The present building is adequate for the present, and the undeveloped side of the court will take care of future expansion if and when needed. The truck entrance through the east façade of the building can be closed by a heavy gate, which gives the court the maximum of security. The principal shops and warehouse doors

open onto a covered loading platform that occupies two sides of the inner court.

Another paved area on the south of the building provides direct truck access to the ground floor portion of the two-story warehouse and to the college mail room. This area also provides parking space for heavy trucks and rubber tired equipment. The area is completely enclosed by a chain link fence and may be entered only through a gate from the main street. Thus when two gates are locked at night all shops, warehouses and automotive equipment are placed under double security.

The campus police and janitors are on duty at night so their offices were

put at the front of the building in order that they could come and go while the rest of the plant is locked up.

On the west side of the plant another area is enclosed by heavy fencing and here is kept the heavy equipment, such as the bulldozer, shovel, tractors and scrapes. The gas pumps also are located within this enclosed area.

The best features of the project are: (1) no outside door that a truck cannot be backed up to; (2) ample covered platforms for loading and unloading; (3) a place for everything under lock and key; (4) planned future expansion; (5) inexpensive construction.

The walls are hollow tile with brick veneer except the below grade portion, which is reinforced concrete. Framing is steel beams and columns and clear span bar-joint floors and ceilings. The offices and corridor have plastered walls, asphalt tile floors, and acoustical tile ceilings. Restrooms have ceramic tile floors and wainscots. All floors on grade are 4 inch concrete slab, wire

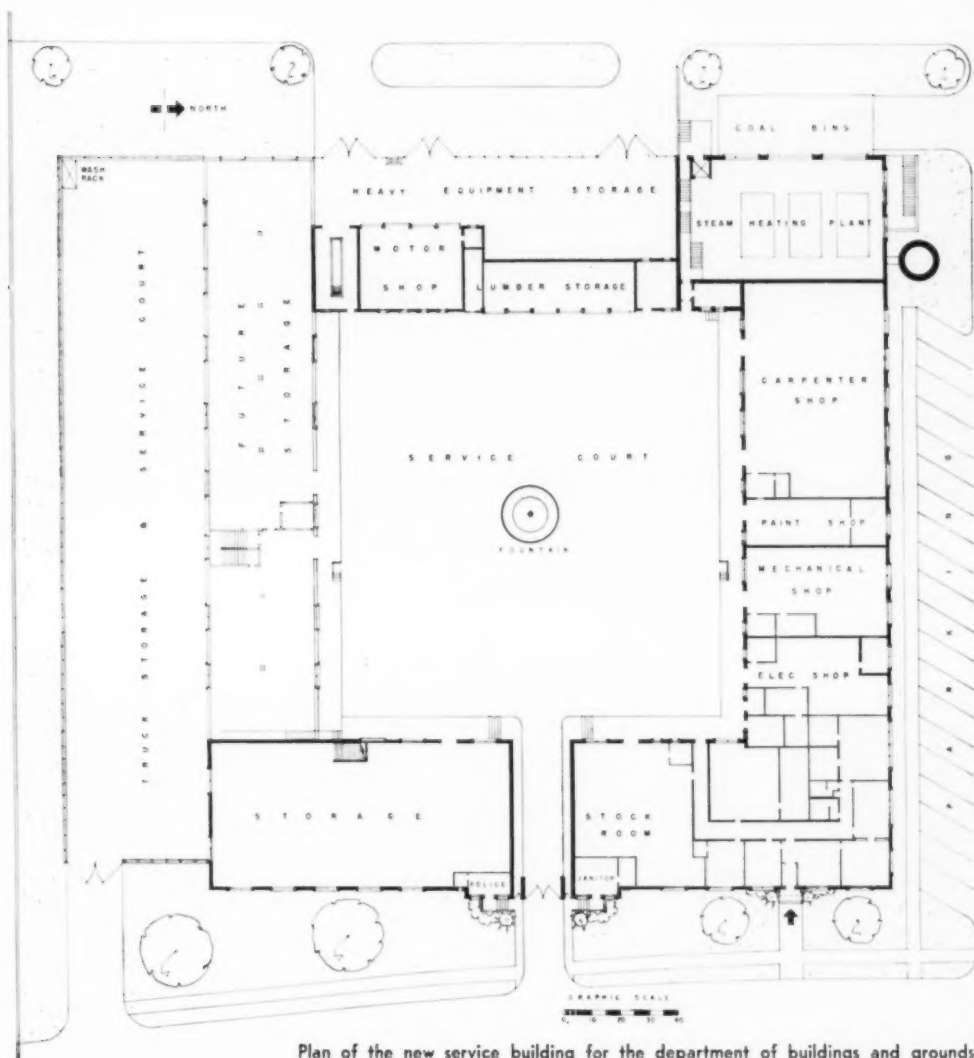
Top of Page: Office users and visitors may come and go without contact with the shops. All legitimate contact is easy, however, through a back corridor.



Above: This entrance opens into the inner court and provides truck access to all shops. The entrance is over-all 20 feet wide, but the drive portion is 14 feet wide; the opening has a clearance of 12 feet 6 inches.

Gates are locked during off hours and opened by campus police in emergencies. Below: An interior view of the carpenter shop at Alabama Polytechnic Institute, located at Auburn. The shop is 75 by 50 feet.





Plan of the new service building for the department of buildings and grounds.

mesh reinforced on waterproof membrane and gravel. Floors above grade are 3 inch reinforced concrete over bar-joints. Shops and warehouse areas have pointed masonry walls and painted ceilings exposed; walls are not painted in the warehouse areas.

There is 241 lineal feet of loading platform, truck body height, and this is 8 feet wide and is covered by a metal canopy. The roof is a bonded, built-up roofing laid over 2½ inch insulated concrete.

Shops and storage areas are cross ventilated. The main electrical service to the building is underground to a transformer vault, and the building is

served by three 75 kva. transformers. Telephone service is provided by a three-key system with nine stations. Steam is used for heating.

There are approximately 20,500 square feet of asphaltic concrete surface in the two service courts and 724 lineal feet of 7 foot chain link fence. The heavy equipment area is not hard surfaced. The steam heating plant containing three 300 h.p. boilers was built in 1948 and was designed to become a part of the completed service building.

There is a total of 27,000 square feet in the building, not counting the heating plant. This space is roughly

broken down as follows: warehouse or storage area, 13,500 square feet; shops, 9000 square feet; drafting room and offices, 3500 square feet; corridor and restrooms, 1000 square feet. In addition, there is a 1930 square footage of covered loading and unloading platform.

Part of the work on the project was done by the department of buildings and grounds. The total cost of the project, including site work and landscaping but not including cost of the land or of the heating plant, was \$141,519.48.

The architect for the project was H. L. Holman Jr., Ozark, Ala.



Freedom and arts united in design of

MEMORIAL LIBRARY

WHEN POPE WROTE "FREEDOM AND arts together fall," doubtless he was not concerned with libraries in liberal arts colleges and student relations to them. But he did combine two elements that our building committee tried to unite in the architectural planning and philosophy of service of the new Greenville College Memorial Library.

It is a part of the basic philosophy of Greenville College that each student should be encouraged to develop his individual capabilities by variety of contact with the best culture of the past and present under his own initiative. Because of this belief and the fact that the students previously have proved their reliability, the committee decided to adopt a building plan granting the greatest amount of freedom and the fewest restraints.

All areas are completely open to students. In each of the main reading rooms, located in the north wing of both levels, there is a combination of book stacks and reading tables, varying in size to suit personal taste from tables seating 10 to individual study desks. All library materials are thus made completely accessible to students

in the reading rooms—regular books, reference materials, and reserves. The only supervision is at the upstairs desk, except at night when a member of the student staff studies in the lower reading room.

Other marks of the same freedom in operation are the browsing corner separated by counter height shelving, the periodical room, the group study rooms off the periodical room where members of any group may work together, and the typing room downstairs where a student may bring his own typewriter or rent one economically. The office also is placed to grant ready access of students to the librarian, either from the circulation desk or the main reading room. Further enjoyment for students during many months of the year is offered in the reading garden, which is set with evergreens and blooming shrubs, and the outdoor covered reading area of the lower terrace. A special informal room is provided for the faculty. For the staff there is a workroom with attached rest and coat rooms and a cozy lounge and kitchenette downstairs.

The library committee has made some effort to include the broader

RUBY E. DARE

Librarian
Greenville College, Greenville, Ill.

liberal ideal by placing in the lower hallway a permanent aluminum picture display rack, by a music listening room and cabinet of records, and by a mounted picture collection open to students.

Actually to get these concepts into brick and steel it was decided that the newer types of architecture and modular construction are best adapted. Thereby greater interior flexibility is possible and more usable space can be purchased for the investment. A module approximately 18 by 22 feet was adopted, and all floors are built strong enough to support stacks. None of the interior partitions are structural. Smaller areas are created largely by furniture placement.

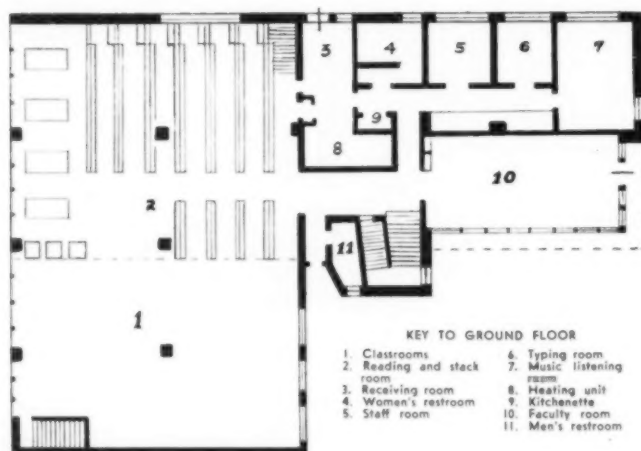
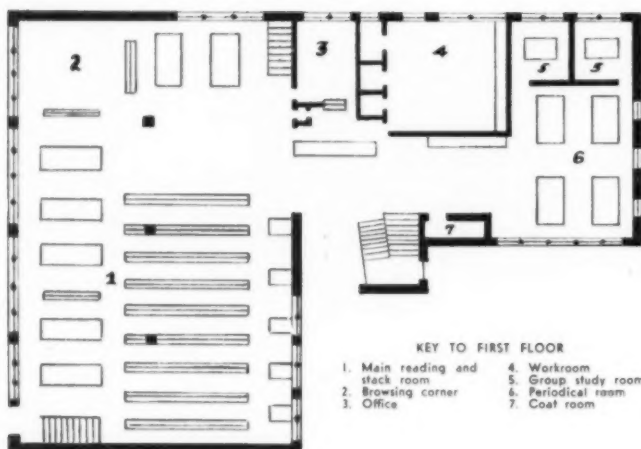
The exterior of the low, flat roofed structure of red brick with limestone trim has none of the traditional "library look." The architect, C. C. Briggs of Emerson, Gregg and Briggs, Peoria, Ill., was exceptionally successful in fitting the plan to the topography. Since the ground slopes both to

the south and the east, a west entrance near the center of the building is possible over a terrace, with only a few steps to the upper floor. About the same number of steps leads down to the reading garden, the lower terrace, and the lower floor. At the same time, the lower floor is, by some terracing down, all above ground except on the northwest.

The same freedom is evident in handling the interior. Because great simplicity was desired and was necessary for the sake of economy, variety was obtained by materials and colors rather than by frills. Inside the main foyer it is possible to see wall materials of eight types: ordinary glass between foyer and vestibule with corrugated glass on one side and brick on the other, plastered walls on interior partitions, enameled car siding in the stair

Right: Circulation desk.
Below: Browsing corner.
All areas in the library
are open to the students.





well, grained squares of birch behind the desk, louvred glass between foyer and office, and painted cement blocks on all exterior walls. The painted cement blocks have proved to be one of the most effective "economies with a purpose." They bring a pleasant variety of texture into each room and their porous quality makes them partially sound-absorbent. The floors are asphalt tile and the ceilings acoustical tile.

The 12 wall colors in the building represent the milder modern tones in such combinations as woodland rose and medium green, chartreuse and Bataan brown, lily yellow and medium brown, blue and gray, light and dark green, and terra cotta and light green. The basic furniture is gray blond, but

the informal furniture has plastic upholstery in tones that contrast with the room in which it is placed in such colors as green, brown, red and chartreuse.

Color is most vivid in the faculty room, where one wall and the window frames are intense blue and the other walls are gray. The furniture is coral red and yellow; draperies are yellow. Since two walls of the room are almost completely windows overlooking the reading garden, much of the color is visible from the exterior.

Lighting problems also were handled with regard to the needs of each area. For day use windows are so generously used and strategically placed as to make little artificial lighting necessary.

The main reading rooms have no west windows to let in undesirable light. Both main reading rooms have windows virtually from floor to ceiling all along the north, which is the length of the room. It is surprising how well this light penetrates even the stack area.

In treating these windows, each was handled independently of the others. Venetian blinds are used on the east and south where the sunlight must be controlled; pull draperies of modern colorful design are substituted where the atmosphere of the room demands, such as in the office, staff room, music listening room, and the faculty room. North windows have no treatment. The artificial light also is adapted to the rooms. The main reading areas have louvred fluorescent lights; other rooms have fluorescent or incandescent, each where the lighting engineer considered it preferable for the purpose of the room.

It was necessary to practice strictest economy to arrive at a cubic foot cost of 87 cents. This low figure was possible partially because the building was constructed by the college under the supervision of a superintendent of construction and because the architectural firm agreed to inspect only upon request.

The structure is L-shaped, the longer wing being 101 by 38 feet and the shorter, 74 by 46 feet. It has a steel interior frame with concrete block, brick faced, outside. The volume is 138,500 cubic feet, the area 11,400 square feet. The cost was \$120,267, exclusive of architects' and superintendent's fees. The furniture and equipment investment was \$17,629; the grading, grounds and landscaping, \$1547. The ultimate capacity of the building, conservatively estimated, is 60,000 volumes and 200 readers. At present, two classrooms are cut off the lower reading room by a wall board partition.

When the planning was in progress some questioned the wisdom of a building with so little supervision and so much freedom of movement and access. We have believed, with Epictetus, that "No man is free who is not master of himself." Several months of use have convinced us that students react favorably to confidence placed in them. We still believe that modern modular architecture effectively achieves the freedom and flexibility that fit most successfully into the liberal arts ideal.



WOMEN'S HALL, UNIVERSITY OF GEORGIA

STANDARDS for RESIDENCE HALLS

with particular reference to women students

BASIC TO ANY DISCUSSION OF HOUSING needs for single women students should be a statement of policy for the education of college women.

A college student's life should be enriched by social education while she is in residence as well as by formal classroom instruction. A university, therefore, should furnish its students with the maximum physical, emotional, moral and social development as well as mental.

A good housing program is the most effective means toward this objective. It provides, as well, great possibilities of correcting those deficiencies of early home and community training that might handicap a college student.

Such a program cannot be carried out effectively without adequate physical facilities. Generally speaking, these facilities for college women students should be planned to meet four

EDITH L. STALLINGS

Dean of Women
University of Georgia

basic needs: (1) safety, (2) health, (3) good living and (4) study. Safety standards are best protected by good planning and construction; health standards by ample space and sanitation; good living standards by adequate living and recreational areas, and standards for study by lighting and soundproofing devices.

Based on these general needs, certain features are essential in a residence hall for college women. These specifications are a reflection of our thinking in planning our new residence hall for women at the University of Georgia.

If the residence is for several hundred girls, it must be divided into units (of not more than 150 girls and half that number is more desirable) that are separated on each floor by fire doors which, although locked, may be

easily opened in an emergency by breaking a glass seal.

Each unit so separated should contain in addition to student rooms (with clothes and luggage closets) and ample toilet and bathing facilities:

1. A main entrance and one other fire exit (on opposite ends if possible) with adjacent stair wells.

2. A lounge adequate for entertaining dates as near as possible to this main entrance.

3. A small kitchenette near this lounge.

4. An office just inside the main entrance that connects with a "bed-sitting room" for the unit counselor. This office should be equipped with the buzzer system panel board and telephone. There should be locked mail boxes built into the wall separating this office from the corridor.

5. This unit counselor's room should have a connecting private bath, a

MEN'S HALL, UNIVERSITY OF GEORGIA



locked clothes closet, a locked supply closet, and a space provided and wired for future installation of a built-in electrical kitchenette unit. It should also have an alarm bell attached to the exists that will ring at night when doors are opened.

6. A laundry room with concrete floor and floor drain, set tubs, drying racks, fixtures for irons, and an automatic washing machine. An automatic signal light in the hall should be connected to iron outlets.

7. A hair washing room with concrete floor and drain, with proper basins, hose attachment, and fixtures for hair dryers, and an outlet for electric sewing machine.

8. A well ventilated locked maid's room with toilet and lavatory and space for dressing. Shelf space for cleaning equipment also should be provided.

9. A shelved linen storage and dispensing room with Dutch door near an exit to facilitate delivery. There should be racks for dry cleaning as well.

10. A trunk storage room on ground floor.

11. A metal lined wastepaper chute with openings on each floor.

12. Wiring in entrance hall for wall electric clock.

Each floor of each unit should have:

1. A broom closet with concrete floor, mop-sink, and racks for brooms, adequately ventilated.

2. Corridor fixtures for drinking fountains.

3. A built-in telephone booth wired to connect with unit office and for additional pay phone if desired.

4. A built-in fire hose.

5. Night light wiring in halls.

6. A lounge or study for the use of the girls on that floor.

The center or main unit also should have:

1. Two suites of rooms containing living room, bedroom, bath and kitchenette for the head resident, who will be in charge of all unit counselors, and the manager of residences, who will have charge of all housekeeping for the various units; these suites wired for telephones.

2. A large parlor or lounge area suitable for receptions, dances and teas for all the units together.

3. Off of this lounge a serving room and kitchenette with an outside service entrance and locked closet for social games equipment.

4. Off of this lounge a men's coat room with lavatory and toilet.

5. Several guest bed-sitting rooms and baths that could be used for conference rooms as well.

6. A locked library room for books and records for use of entire hall.

7. Off of this library a switchboard room with wiring to connect all women's residence halls.

8. A snack bar and student supply shop in the basement with outside entrance for girls and their dates.

9. A typing room with acoustical ceiling in basement.

ESSENTIAL FEATURES

Essential features of student rooms include:

1. Not more than two students to a room.

2. No sleeping rooms in basement.

3. No sleeping rooms in attic unless well insulated.

4. Luggage closet in space above clothes closet.

5. Closet doors to allow ventilation to prevent mildew.

6. One overhead electric fixture and at least one convenient outlet on each of three sides of the room.

7. Standard towel drying racks.

8. Two-way buzzer fixture connecting with unit office.

9. If only one window, provision for cross ventilation.

10. Cylinder locks on closets and room door. Individual closet keys also to unlock room door and mail box in unit office wall.

11. Smooth finish tinted plaster walls.

12. Picture molding around room about 6 feet from floor.

Other essential features for the entire building:

1. Wiring on outside for flood lights on corners of building.

2. Acoustical ceilings for halls and social room.

3. Incinerator in basement.

4. Storage room in basement for furnishings, extra mattresses, and the like.

5. Copper water pipes throughout the building.

6. Student rooms shut off from recreational areas by double doors.

7. All exits wired to alarm in unit counselor's office.

The recognized minimum requirements of space and fixtures are as follows:

1. Floor space: single student room, 108 sq. ft.; double student room, 200 sq. ft.; social space total in whole building, 23 sq. ft. per girl; dress

closets, 32 by 40 inches per person; minimum ceiling height, 9 feet.

2. Windows: Window space in student rooms should be 20 per cent of floor space.

3. Bathing, toilet, laundry fixtures: toilets, one for six; showers, one for six; lavatories, one for six; hair washing basin, one for 50; set wash tubs, one for 40; bath tubs, one for each floor.

The following items are highly desirable but not essential:

1. Space around central plumbing areas to allow repairs within double walls.

2. Radiant heat for whole dormitory. Although the initial cost of installation may be more than that for standard heating, it is highly desirable in any residence which will be used for 50 years for the following long-time savings: (a) no hardwood floors to wax and repair; (b) more even distribution of heat; (c) no heating fixtures in rooms to take up wall space and gather dust; (d) greater cleanliness of walls and draperies and upholstery, saving redecoration costs; (e) no leaking radiators damaging floors and walls and requiring plumber's services.

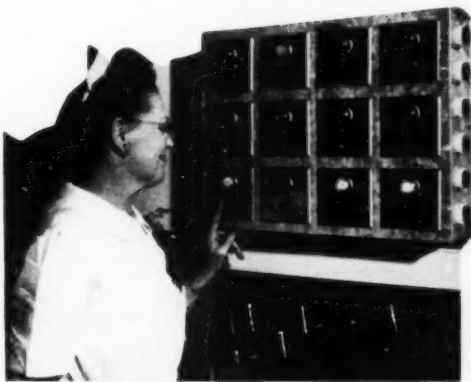
The cost of construction will vary according to the adequacy of planning for essential and highly desirable living facilities as well as for the type and quality of furnishings.

Before the war, a residence hall could be built and equipped for less than \$2000 per student. The figure now runs from a minimum of \$2700 to as high as \$7000 (University of Illinois).

Any construction planned and carried out today should embody the best principles of planning that would provide the essential facilities required in an adequate college educational program for 50 years to come. The trend is toward an even, increasing interest in the individual student, her needs, and the requirements for the development of her potentialities in every phase of college life.

Residence halls have ceased to be considered money-making investments. Just as are classrooms or laboratories, they are now recognized as part of any college's or university's total equipment or physical outlay for education in its full sense.

From a paper delivered at the meeting of the Southern Association of College and University Business Officers, Atlanta, Ga., October 1950.



The picture shows the control panel being operated by the line supervisor. The arrangement of lights on the panel corresponds to that on the outdoor traffic board.

How a California

CAFETERIA CONTROLS TRAFFIC

SCOTT WILSON

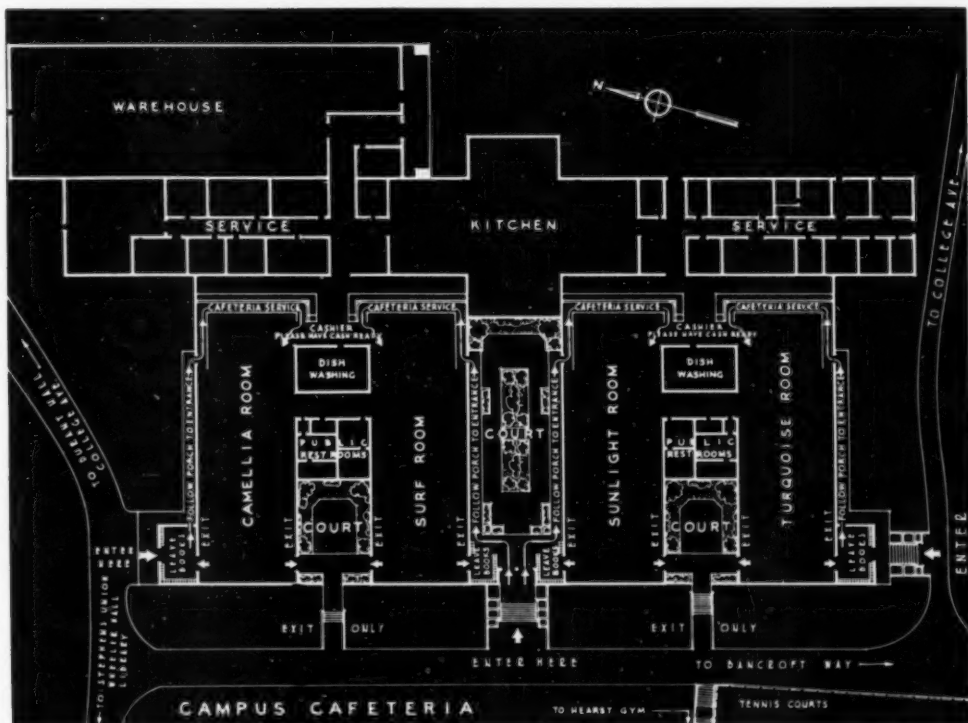
Principal Food Service Manager
University of California, Berkeley

THE CAMPUS CAFETERIA AT THE University of California is a reconverted navy mess hall moved to the campus after the war to meet a need for large-scale student feeding. As reassembled on the university campus at Berkeley, one of the features of the cafeteria is its arrangement of four parallel dining rooms.

These four dining rooms presented quite a problem to those of us trying to make the most efficient use of the rooms. At noon, since the majority of the students (about 2000) approach the building from the paths leading to our Camellia room, this room and the ones next to it would fill up and have long lines waiting while at the far end of

the building the Turquoise room would be relatively empty. In other words, because of its inaccessibility it seemed impossible for us to obtain the full use of this room.

We wanted to close our dining rooms one at a time as the noon rush subsided to concentrate the stragglers into fewer rooms but we had no satis-





When this picture was taken it was long past noon and only the Surf Room (as shown by the lights) remained open. Duplicate traffic board at far end of building guides those approaching from the opposite direction.

factory way to communicate our desires to the customers. We posted signs listing the meal hours in the various rooms, but the students seldom stopped to read them. We found schedules unsatisfactory for we frequently wanted to change them as our volume of business differed from day to day. We were faced with a dilemma. If we tried to change the schedules we confused and annoyed the students; if we didn't change them we had to hire unnecessary help to keep the dining rooms open at times when they were not needed.

It was a happy day for the management and the students when the idea occurred to us of using the familiar street corner red, yellow and green traffic control lights to regulate the flow of customers. At the two corners of the building we installed two large billboards complete with colored bulbs to indicate the situation as it exists in each of the dining rooms. Across the

top of the board are the names of the four dining rooms and down either side is the explanation of the color: green, *no waiting*; yellow, *short wait*; red, *closed*. There are three colored bulbs, a green, a yellow and a red, under the name of each dining room. As a student approaches the cafeteria he can see the lights on this board and at a glance he can tell where he will get the quickest service. He also can see the names of the rooms displayed on the front of each wing so, without breaking stride, he proceeds to the proper dining room.

CONTROL PANEL INSIDE

There is a control panel for this system of lights inside the building behind the serving lines at a point where the dining room supervisor can watch all four lines. She can open or close dining rooms at will merely by turning a switch on this control panel. We now get full use of our inaccessible Tur-

quoise room. We display a green light (*no waiting*) on this room and yellow lights (*short wait*) on the other three rooms, and a rush of customers to this room takes place. We also are able to close the dining rooms whenever we choose and in any order the occasion demands without confusing our customers. To close a dining room we have only to turn on the red light (*closed*) and the flow of patrons to this room stops immediately. Actually, working the light on a dining room is like turning on or off a stream of water—the control is so definite and the response is so quick.

Our customers seem quite willing to cooperate with this unique method of control. In fact, the novelty and efficiency of the system seem to delight the students who find in it a constant source of favorable, if amused, comment. We heartily recommend this method of traffic control to anyone with a similar problem.

IN 1934 THE OKLAHOMA COLLEGE for Women issued \$130,000 in revenue bonds for the construction of three dormitories on its campus, *i.e.* the Ruby Canning, the Roberta Lawson, and the Alice Robertson halls. The only security offered the purchaser of these bonds was the agreement of the college to apply the rentals to be received from these three new residence halls, and from all the other residence halls on its campus, toward the payment of principal and interest.

In 1951 the college decided to offer another revenue bond issue, in the amount of \$200,000, for additions to two older residence halls, *i.e.* the Nellie Sparks and the Frances Willard halls, offering as security the revenue to be derived from these two dormitories. The prospective purchaser of the bond issue raised the question as to whether the income had not already been pledged to secure the 1934 issue.

The college requested a declaratory judgment from the supreme court of Oklahoma on this point. The president of the college filed a certified statement with the court to the effect that the college administration had assumed, on the basis of an earlier decision¹ of the Oklahoma supreme court, that only the revenue obtained from the dormitories erected with the proceeds from the sale of the 1934 bond issue could be utilized for their payment, and that the college was therefore not free to utilize income derived from its other dormitories for this purpose, despite the agreement with the bondholders to the contrary. The president further certified to the court that no portion of the revenue from the two dormitories to be improved with the proceeds from the proposed 1951 bond issue ever had been applied in payment of either interest or principal of the 1934 issue.

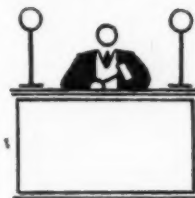
The court, in its opinion,² dated April 17, 1951, held that the 1934 bond agreement did not constitute a burden upon the future income of the Nellie Sparks and the Frances Willard halls and that the college was free to pledge the entire revenue to be derived from these two dormitories for the payment of interest and principal of the 1951 bond issue.

This decision is only a brief chapter in the history of the development of

Legality of Revenue Bonds Issued for Building Dormitories

T. E. BLACKWELL

Vice Chancellor and Treasurer
Washington University, St. Louis



the revenue or limited obligation bond. Revenue bonds have been defined³ as "bonds of political units that are payable as to principal and interest exclusively from the earnings . . . of a specified revenue producing enterprise for the acquisition, construction, improvement or operation of which enterprise the bonds were issued." They are to be contrasted with general obligation bonds, *i.e.* those for which the full faith and credit of the state, county, municipality or other political unit is pledged, backed by the sovereign taxing power of the state.

The revenue bond was developed or invented to provide a release from the financial strait jacket imposed upon the states by constitutional limitations and restrictions on the power of their legislatures to borrow money.

Students of American history are aware of the many ill-considered projects for internal improvement sponsored and financed by the states during the first 50 years of the Nineteenth Century. Many of the state legislatures in those early days authorized large bond issues to subsidize the construction of canals and railroads, and to finance the establishment of banks and private industrial projects.⁴ These obligations were issued in excess of the ability and willingness of the citizens to repay them. The panic of 1837 saw widespread defaults of state bonds. There were two other waves of repudiation, *i.e.* those of 1848-60 and 1870-84. As a result, the voters of practically all of the states demanded and obtained constitutional limitations upon the power of the legislatures to pledge the full faith and credit of the state for public improvements. According to a

study prepared in 1935,⁵ the only states without constitutional debt restrictions at that time were Connecticut, New Hampshire, Mississippi, Tennessee and Vermont.

With the rapid growth of the cities during the latter part of the Nineteenth Century, there was an increasing demand for fewer restrictions upon the power to borrow money to finance much needed public services and improvements. The revenue or limited obligation bond was found to be one answer to this problem. The bondholder was persuaded to accept an obligation secured solely by the income to be derived from the utility constructed with the proceeds of the bond issue. Since the bondholder could not look to any other funds of the state for repayment, it was reasoned that the issuance of such limited obligation bonds did not contravene constitutional debt limitations, *i.e.* that they were not debts of the state.

The courts were soon called upon to rule upon this interpretation. The reluctance of some jurists, even as late as 1933, to accept the sophistry of this "special fund doctrine" is well illustrated in the case of *Baker v. Carter*, previously cited. In 1931, the Oklahoma state legislature authorized the board of regents of the Oklahoma Agricultural and Mechanical College to issue \$450,000 in bonds for dormitory construction. The regents agreed to collect rentals and to deposit them with the state treasurer as a special fund for the payment of the bonds. The act provided that the bonds should be tax exempt and a lawful form of investment for the sinking funds of

¹Baker v. Carter, 25 P. (2d) 747 (1933).

²Application of the board of regents of Oklahoma College for Women, 230 P. (2d.) 453.

³Laurence S. Knappen, "Revenue Bonds and the Investor," (1939).

⁴B. V. Ratchford, "American State Debts," (1941).

⁵Edward W. Carter and Charles C. Rohlfing, "The Pennsylvania Constitution and Finance," *Annals of the American Academy of Political and Social Science*, Vol. 181 p. 125.

the state or any of its political subdivisions.

The validity of the issue was questioned on the grounds that the bonds were obligations of the state of Oklahoma and that the issue would exceed the constitutional debt limitation. The majority of the judges of the supreme court upheld the validity of the issue, after a detailed summary of decisions in other jurisdictions, but a strongly worded dissenting opinion was signed by the chief justice and two of his associates. They reminded the court that the "special fund theory" relied upon to support its decisions, *i.e.* "that the obligation so elaborately to be expressed in these proposed bonds is that of nobody, but only of the special fund itself . . . has been definitely and most recently rejected by this court. The agreement to pay . . . creates an indebtedness no matter from what source the funds are to be derived."

"These bonds are to be tax exempt securities. Does not that provision of the law contemplate that they are obligations of the state or of one of its indivisible counterparts? . . . Just as water seeks its own level, so will these pseudo securities (which might, in all seriousness, be designated as bedroom bonds) seek the investment of the least wary who is not banker or financier, but the elected public servant who is authorized by the act to invest therein, not his own money, but the money of the sinking fund of the government, entrusted to his care.

"These are what are commonly known to the vernacular as 'wildcat bonds.' Shortly after the World War this state experienced an epidemic in such public finance, including the investment of sinking funds, in such wildcat bonds. Apparently again the cycle is reached."

Despite this polemic, it is the general rule⁶ that constitutional debt restrictions are not applicable to obligations which are payable only out of the fund derived from the specific revenue producing properties constructed or purchased with the proceeds from their sale.

In 1948, Robert Bruce Stewart and Ray Lyon prepared a summary⁷ of recent court decisions involving the legal authority for the creation of debt by state colleges and universities.

⁶146 ALR 328 (1941), supplementing annotations in 72 ALR 638 and 96 ALR 1385.

⁷Stewart and Lyon, "Debt Financing of Plant Additions for State Colleges and Universities," (1948).

Financing Residence Facilities Through Self-Liquidating Program

W. T. INGRAM

Business Manager
Alabama Polytechnic Institute

TO OBTAIN CONSTRUCTION FUNDS for residence facilities to be repaid by pledged revenues, the source of funds is limited primarily to the sale of building revenue bonds and the use of endowment funds, except, of course, for private institutions that may be in position to mortgage property.

There seems to be a hesitancy to borrow from institutionally owned funds, probably owing partially to the fact that at some future time a laxity in making payments might develop. In order that we may consider a definite plan, let us think about the method of borrowing by the issuance of building revenue bonds or first mortgage bonds when possible.

The ability to borrow money may be said in general to be based upon the lender's opinion of the borrower's ability and intentions to repay the loan with a stipulated charge for the use of the funds. The security supporting the loan, the certainty of anticipated revenues, the length of maturities, the reputation of the institution, the tax status, and other factors determine the amount of the loan and the interest to be charged. Current money market conditions also affect loans and influence interest rates.

Once we have established the source and cost of the loan, we must think about the job of amortizing the principal and interest. Paying back a loan may develop into an arduous task unless wise planning is done in advance and unless the plan is diligently followed to final maturity of the bonds.

How will these loans be repaid? From revenues and earnings, primarily. I doubt whether a definite formula

From a paper read before the second annual institute of the Southern Association of College and University Officers, Atlanta, Ga.

can be developed, owing to the wide variance of circumstances and conditions under which loans are obtained. For example, under the P.W.A. program we received a grant of 45 per cent of construction and borrowed 55 per cent. At the then cost of construction the rentals required to be set were in keeping with existing rates. In our case we were able to set a residence hall room rental of only \$8.50 per person per month for two in a room.

Now the construction cost is doubled, with no grants and with increased operating costs. By simple arithmetic we can figure what room rentals would be required to finance the total cost of construction. I know of one school that charges \$157 per person for nine months to finance the loan.

Institutions that have existing debt-free residence facilities may be in position to borrow by pledging revenues from existing and proposed new facilities to finance new construction if proper rentals are set and if the proper ratio of new facilities to old is established.

Many factors must be taken into consideration when plans are made to borrow funds for residence construction to be self-liquidating, including the following:

1. Construction costs, considering the character of the architecture and local labor conditions.
2. Maximum rentals that the students who will be attending the college can pay. State schools in some instances cannot charge as much as private schools can.
3. Interest rates and length of maturities that would be applicable in the locality.
4. Size of student body and adoption of parietal rules.



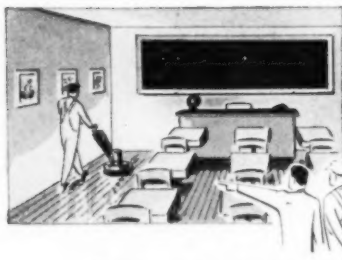
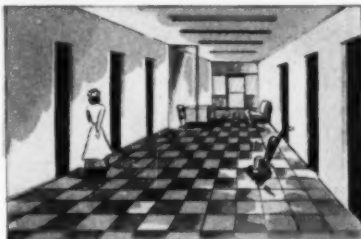
The Boss said...

*"FIND A BETTER WAY
to care for our floors!"*

So I called . . . at other buildings and institutions
to see how they maintained their floors . . . and I
certainly learned a lot!



- My first stop was a hospital. Corridors gleamed and the superintendent showed me the reason. He keeps a quiet Clarke Floor Maintainer in constant use, steel-wooling and polishing floors. In the kitchen, the custodian was using a new Clarke Wet-Dry Vac and he showed me how completely and easily it picks up water, dust and dirt.



- Next I visited a school. The floors were being completely refinished. A Clarke Floor Maintainer was at work steel-wooling a freshly sealed maple classroom floor. In the gym a Clarke Sander was cutting off several years accumulated finish. The jobs these do . . . and the ease and speed with which they do them was a revelation.



- A church was my next stop. By this time I was looking for the Clarke name on all floor machines, but here they had only one Clarke and a machine of another make. Here again, I discovered something else about Clarke equipment. The custodian keeps a record of service and repair costs for both, and though the Clarke had run twice as many hours, its maintenance cost was much less.

It was the same wherever they were using Clarke equipment. Floors were in excellent condition, people were enthusiastic, and costs at a minimum. My recommendation to the Boss . . . and to you? Ask Clarke for a demonstration right away!

Whether you scrub, wax, polish, steel-wool, sand or even shampoo rugs and carpets, Clarke has floor care equipment to meet your needs. All Clarke machines are liberally guaranteed and will give you years of dependable service. Mail coupon today. No obligation.



Clarke

**CLARKE
FLOOR MAINTAINER**

Scrubs, waxes,
polishes, steel-wools,
sands



CLARKE WET AND DRY VACUUM

Heavy duty.
Picks up water, dirt, dust

Sales & Service Branches in All Principal Cities

Clarke Sander Machine Company
24 Clay St., Muskegon, Mich.

We are interested in better floor care.

- ☐ You may arrange a free demonstration.
☐ Send complete information on ☐ Clarke Floor Maintainers ☐ Clarke Wet-Dry Vacuum Cleaners

Name _____

Address _____

Zone _____ State _____

City _____

NEWS

Plant Planning Laboratory at Stanford . . . Governors Criticized
for Racial Stand . . . Pre-Induction Scholarships Awarded by Ford
Foundation . . . Construction Controls Imposed for Fourth Quarter



Dr. James D. MacConnell takes Dr. R. A. Boyd, head of the Daylight Laboratory at the University of Michigan, on a tour of Stanford School Plant Planning Laboratory.

Stanford Has Laboratory for Plant Planning

STANFORD UNIVERSITY, CALIF.—Stanford University officially opened a new school plant planning laboratory on July 26.

Dr. James D. MacConnell, associate dean of the school and director of the laboratory, described its purpose as follows:

"First, we want to provide a work area for continuing research on school building and equipping. Of course, we want the laboratory to be of the utmost benefit to school administrators and future administrators who come to Stanford for training.

"Second, and no less important, we want to offer visual demonstrations of the materials now available to help solve the problems of school construction. The new laboratory gives us an

opportunity to be of practical service to the builders of schools, architects, school boards, P.T.A.'s and the citizen with an interest in good school planning."

Two years in its own planning stage, the laboratory was made possible through the cooperation of more than 60 manufacturers of school equipment and building supplies. Among its features is a scale-model classroom that demonstrates the effectiveness of different methods of lighting and the use of color. The model is equipped with scale-model desks which are fully adjustable to all the posture and visual needs of school children. It is also equipped with daylight diffusing prismatic glass blocks to admit an ideal amount of natural light from outdoors.

Three Southern Governors Criticized for Their Stand on Segregation

ATLANTA, GA.—The Southern Regional Council has made public an "open letter" criticizing the governors of three Southern states for declaring that segregated schools would be retained in their states even if the practice were ruled unconstitutional by the U.S. Supreme Court.

Addressed to James F. Byrnes of South Carolina, Herman E. Talmadge of Georgia, and Fielding L. Wright of Mississippi, the letter read, "The recent utterances of each of you have had a secessionist ring to them which echoes strangely in modern ears."

The council, which has its headquarters here, is composed of educators, clergymen, editors, civic leaders, and representatives of organized labor and of industry.

Following, in part, is the council's letter:

"It is our conviction that the vast majority of Southerners have no wish to see their region isolated from, and at odds with, the rest of the country.

"Although national legislation or federal court rulings may occasionally go against their grain, they are willing to sacrifice personal and sectional preferences to a higher loyalty.

"They recognize that our system of government is a good one and that the South has more than proportionate voice in the conduct of it.

"Until proved wrong, we will continue to believe that the people of Georgia, South Carolina, and Mississippi will not—in the name of Southern tradition or anything else—be willing to declare a moratorium on American democracy.

"The main consideration is not what the Supreme Court will rule, or what will be the administrative outcome of its ruling; it is how we, as Southerners

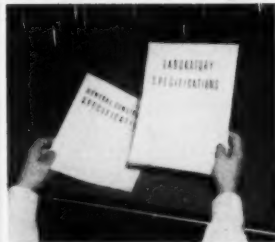
Here's why **4** out of **5** laboratories are equipped by Professional manufacturers of laboratory equipment



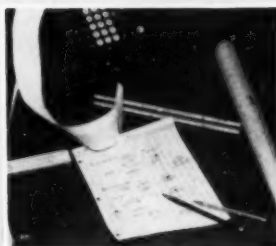
1 Professional help at the planning stage—Thoroughly experienced representatives of any Professional laboratory manufacturer will work with you in translating your requirements into tangible plans. Drawing on this reservoir of practical experience is an important step toward getting the most out of your budget.



2 Design assistance without cost or obligation—Here, again, the Professional method of laboratory planning pays important dividends in better designed, permanently satisfactory laboratory facilities. This FREE service puts thousands of dollars worth of design talent at your disposal.



3 Have your architect prepare separate laboratory specifications—or have laboratory specifications made a separate section of your general construction specifications. This permits direct bidding to owners or contractors by Professional laboratory manufacturers—assures you full benefits of this better approach to laboratory planning.



4 Secure bids directly from Professional manufacturers—This gives you and your architect clear and uncluttered control, frequently results in substantial cost savings. Price information supplied by Professional manufacturers is factual, reliable, free of guesswork. You know where you stand and you're assured of Professional quality.



5 Highly specialized manufacturing facilities—are essential in the making of fine laboratory equipment. By placing your order with a Professional manufacturer you secure an important production balance—the economy of continuous production of laboratory equipment—plus—custom manufacture where needed.



6 Properly designed for today and tomorrow—A representative of any Professional laboratory manufacturer can be of substantial assistance to you in insuring that the laboratory you're planning will be flexible . . . able to change in function as the future requires. Use this service now!



Is this useful booklet in your files?

It was designed for you and contains a variety of authoritative information on laboratory planning. Thousands of copies have already been put to profitable use—if you have not received yours, write today!

Laboratory Equipment Section • Scientific Apparatus Makers Association
20 North Wacker Drive • Chicago 6, Illinois

composed exclusively of—

Professional manufacturers of laboratory equipment



Did You Know **HEINZ** Fine Quality Foods In

HEINZ VINEGARS

☐ White ☐ Cider ☐ Malt ☐ Rex Amber

HEINZ SOUPS

☐ Bean ☐ Chicken Rice ☐ Cream of Tomato
☐ Beef Noodle ☐ Clam Chowder ☐ Vegetable with Beef Stock
☐ Beef with ☐ Cream of Chicken ☐ Vegetable without Meat
Vegetables ☐ Cream of Green Pea ☐ Cream of Mushroom
☐ Chicken Noodle ☐ Chicken Consomme

HEINZ OVEN-BAKED BEANS

☐ Baked Beans with Tomato Sauce ☐ Baked Beans with Molasses Sauce

HEINZ CHILI and CHILI BEANS

☐ Chili Con Carne ☐ Precooked Chili Beans

HEINZ CONDIMENTS and SALAD DRESSING

☐ Ketchup ☐ Yellow Mustard
☐ Chili Sauce ☐ Brown Mustard
☐ Worcestershire Sauce ☐ Salad Dressing

HEINZ JUICES

☐ Tomato ☐ Pineapple ☐ Orange
☐ Grapefruit

HEINZ OLIVES

☐ Queens ☐ Stuffed Queens
☐ Stuffed Manzanilla

MAGIC ONIONS

☐ Chopped ☐ Sliced

Brings You So Many Thrifty Bulk Sizes?

Check your requirements for fine foods against Heinz outstanding list of low-cost menu favorites!



HEINZ VEGETABLES

- | | | |
|--|--|---|
| <input type="checkbox"/> Sweet Peas | <input type="checkbox"/> Sliced Beets | <input type="checkbox"/> Diced Carrots |
| <input type="checkbox"/> Whole Green Beans | <input type="checkbox"/> Whole Kernel Corn | <input type="checkbox"/> Sliced Carrots |
| <input type="checkbox"/> Cut Green Beans | <input type="checkbox"/> Cream Style Corn | <input type="checkbox"/> Spinach |
| <input type="checkbox"/> Whole Beets | <input type="checkbox"/> Tomatoes | <input type="checkbox"/> Lima Beans |
| <input type="checkbox"/> Tomato Paste | <input type="checkbox"/> Succotash | |

HEINZ FRUITS

- | | | |
|---|--|--|
| <input type="checkbox"/> Apple Sauce | <input type="checkbox"/> Grapefruit Segments | <input type="checkbox"/> Pineapple Slices |
| <input type="checkbox"/> Apricot Halves | <input type="checkbox"/> Peach Halves | <input type="checkbox"/> Pineapple Tidbits |
| <input type="checkbox"/> Fruit Cocktail | <input type="checkbox"/> Peach Slices | <input type="checkbox"/> Pear Halves |
| | <input type="checkbox"/> Sliced Apples | |

HEINZ PICKLES and RELISH

- | | |
|---|--|
| <input type="checkbox"/> Sweets | <input type="checkbox"/> Fresh Cucumber |
| <input type="checkbox"/> Hamburger Slices | <input type="checkbox"/> Whole Dilled <input type="checkbox"/> Dills |

HEINZ MACARONI and SPAGHETTI

- | | |
|--|--|
| <input type="checkbox"/> Spaghetti with Tomato Sauce | <input type="checkbox"/> Dry Spaghetti |
| <input type="checkbox"/> Elbow Macaroni | |

HEINZ JELLIES

Tin and Jar

- | | | |
|--|-------------------------------------|----------------------------------|
| <input type="checkbox"/> Apple | <input type="checkbox"/> Cherry | <input type="checkbox"/> Currant |
| <input type="checkbox"/> Mint Flavored Apple | <input type="checkbox"/> Elderberry | |
| <input type="checkbox"/> Grape | <input type="checkbox"/> Blackberry | |
| <input type="checkbox"/> Raspberry | <input type="checkbox"/> Crab Apple | |

SUN-MAID RAISINS

- | | |
|--------------------------------------|-----------------------------------|
| <input type="checkbox"/> Bakery Type | <input type="checkbox"/> Midget |
| <input type="checkbox"/> Muscats | <input type="checkbox"/> Currants |



H. J. Heinz Company
Hotel and Restaurant Division Dept. CU-91
Box 57, Pittsburgh, Penna.

Gentlemen:
Please send me more information about your fine foods in thrifty bulk sizes.

Name _____
Address _____
City _____ State _____

NEWS

and Americans, will accept the results, whatever they may be.

"We sincerely urge that you use the prestige of your high offices to set an example in that regard which the whole South can follow in honor and good citizenship."

Pointing out that various denominations in the South recently had opened seminaries and colleges to students from both races, the council questioned the possibility of a proposal to turn public school systems over to churches,

or other private groups, to be administered on a bi-racial basis. The council added that "many sincere Southern people would be deeply distressed to see their churches cast in the rôle of champions of segregation."

Urges Corporations to Aid Education

WASHINGTON, D.C. — Beardsley Ruml, New York economist, on August 13 urged that American business and

corporate organizations take full advantage of the 5 per cent of their net earnings that the federal government allows corporations to deduct for educational purposes.

Speaking on behalf of the National Planning Association, Mr. Ruml stated that if all corporations used this tax free money, \$2,200,000,000 would be set aside this year for education, welfare and scientific purposes. The most ever spent was 12.5 per cent of net corporate earnings in 1945.

In discussing his plan, Mr. Ruml proposed a schedule for corporation boards of directors to follow in the four months remaining this year in order to get the program under way. He suggested that a committee should be established at the September board meeting and report back in October. At that time, he said, an official of the corporation could be chosen to work out details and the corporation's lawyer could draw up papers for an affiliated nonprofit corporation to administer the funds.

CUT administrative costs SPEED record copying

Here are two fast, economical ways to prepare transcripts and copy administrative records of every type. With them you eliminate proofreading, yet are certain of absolute accuracy. You can copy anything printed, written or drawn on white or colored material, even on heavy card stock. Records can be one or two-sided.

portagraph

Easily operated contact printer provides sharp, clear reproductions. No dark-room needed. Automatic electric timer controls exposures. Developing is a simple procedure. Portagraph paper is pre-cut, no trimming waste.



dexigraph

High-speed photo copying camera makes up to 300 exposures per hour. Copies at same size or at any reduction down to 50%. Can be easily moved from one department to another, requires no plumbing or special wiring at point of use.



For free information, ask for booklets P-238 and D-286. Write to Room 1355, Management Controls Reference Library, 315 Fourth Ave., New York 10.

Remington Rand

Ford Foundation Gives Pre-Induction Scholarships

NEW YORK.—Four universities, co-operating with a Pre-Induction Scholarship Program sponsored by the Ford Foundation, have selected 200 outstanding students from 32 states to participate in the program.

Its purpose is to provide the youths with two years of liberal education before they enter military service. It will be financed by a grant of approximately \$1,200,000 from the Fund for the Advancement of Education, a division of the Ford Foundation. The plan will enable each of the four universities, Chicago, Columbia, Wisconsin and Yale, to accept this fall 50 young men, three-fifths of whom must be youths who have not yet completed high school. The students in this younger segment, however, must have completed at least the 10th grade or its equivalent.

Each of the 200 students, all of whom must be younger than 16½ on September 15 of this year, will receive two-year full tuition scholarships. In most cases, they also will receive cash grants up to \$1000 for living expenses.

New York State provided the largest group of winners comprising 45 per cent of the students; Illinois was next with 10 per cent of the total; New

Look to

SIMMONS...

for Furniture and sleep equipment

**Used by hotels, tourist courts, clubs,
schools, colleges, rest and convales-
cent homes, institutions of all kinds**

Bring to Simmons your plans for furnishing new rooms or modernizing old ones! Simmons' complete line of fireproof steel furniture in 20 color and wood grain finishes, offers you far more opportunity to select equipment for comfort, color harmony, maximum utility, long life and economy.

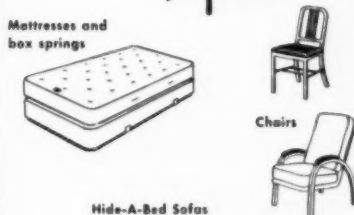
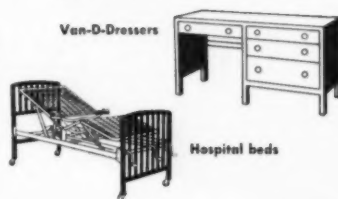
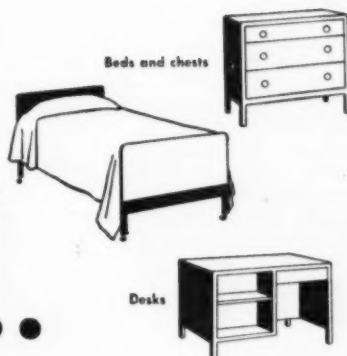
Simmons furniture and sleep equipment are patterned to modern demands, whether it is room furniture for the finest hotels, or hospital equipment to speed recovery. The ablest designers, engineers and color stylists are employed. Products are brutally tested in laboratories for structural flaws, and use-tested for guest or patient approval!

Shown here are only a few products from Simmons' complete line. Many more are pictured and described in the catalogs offered. It will pay you to have these catalogs on your desk. They're free—so send for them today!

SIMMONS COMPANY

Display Rooms:

Chicago 54, Merchandise Mart • New York 16, One Park Avenue
San Francisco 11, 295 Bay St. • Atlanta 1, 353 Jones Ave., N. W.



Simmons Company,
Merchandise Mart Plaza, Chicago 54, Illinois.

Please send us your Hospital Equipment
catalog: Guest Room Catalog.

Name Title
Business
Address
City State

NEWS.

Jersey was third with 9 per cent, and Pennsylvania was fourth with 5 per cent.

Nearly 2000 students applied for the scholarships. A second group of 200 students will be admitted in the fall of 1952 so that the experimental project will run for three years.

One of the important results of the undertaking is expected to come from an analysis and evaluation of the program. During the first years, means of extending participation to other in-

terested colleges will be explored, either by a conference in the summer of 1952 or by a system of "internships," which would enable faculty members of other colleges to become directly acquainted with the program.

Norwich Gets First Loan Under 1950 Housing Act

WASHINGTON, D.C.—Approval of a loan of \$340,000 to Norwich University of Northfield, Vt., for construc-

tion of a 138 unit residence hall for students was announced recently by Raymond M. Foley, administrator of the Housing and Home Finance Agency.

This is the first loan to be approved under Title IV of the Housing Act of 1950, for which President Truman has released \$40,000,000 of the \$300,000,000 originally authorized by Congress. Under the restricted program the low-rate, long-term loans are made only for college housing directly related to the defense effort.

Norwich University is the state military college of Vermont and one of the eight military colleges in the country. Graduates are commissioned as officers in the army. The residence hall to be constructed at the university will duplicate several others now on the campus and will make it possible for a larger number of students to undertake training as reserve officers.

Ohio Ranks First in Producing Scientists

MARIETTA, OHIO. — Ohio tops the nation in the number of colleges that produce the greatest percentages of professional scientists per hundred men graduates, according to a study in the *Journal of Higher Education* by Harry F. Lewis, which shows that Ohio ranks first in a list of the 30 top colleges in the country in this respect.

Ohio placed six colleges on the list. Pennsylvania ranks second with four. Eight states have two each; four states, one each. Twenty-two of the 30 colleges are located in 10 mid-western states. In all, 14 states were represented.

The Lewis study parallels in many of its findings a similar study made by a committee at Wesleyan University in Connecticut, and published in May by the weekly journal, *Science*. However, the Lewis study considers graduates from 1932 to 1942 while the Wesleyan study checked those from 1924 to 1934.

The Wesleyan list of 50 top colleges and universities in the nation included eight from Ohio, four from Iowa, and three from Pennsylvania. Twenty-two states were represented.

The Lewis list places Oberlin first among colleges in Ohio and second in the nation with 10.4 per cent of its men graduates earning doctor's degrees in science. Other Ohio colleges,



It is only our good fortune—and yours—that we can offer a fairly large group of these popular K-10's at a time when fine recording instruments are becoming scarce. It would be wise to place your order with your PRESTO distributor now, while these units are still available.

The Presto K-10 is an improved version of the K-8, foremost machine of its kind for use in speech, voice, language, dramatics, music and other classes. It is available for MICROGROOVE (long playing) as well as standard recording. Two speeds: 33½ and 78 rpm—also 45 rpm at additional cost. Two interchangeable pick-up arms for

microgroove and standard discs; single control for choice of recording, playback and public address. Can record as long as 30 minutes for one side of a 13¼" disc... A fine, versatile instrument of good fidelity, weighing only 46 pounds—designed and priced to meet the requirements of educators and voice trainers everywhere.



IN CANADA: Walter P. Downs, Ltd., Dominion Sq. Bldg., Montreal, Canada
OVERSEAS: M. Simons & Son Co., Inc., 25 Warren St., New York, N. Y.

WESTON *Instruments*



From simple galvanometers or multi-purpose test units, to precise laboratory standards . . . WESTON Instruments inspire their users to new achievements in their quest for knowledge.

Students soon learn to admire the accuracy for which WESTONS have long been famous. Instructors appreciate their stamina and dependability. Critical research workers place full confidence in their indications. And practical administrators know that their year-after-year dependability makes the cost of WESTON equipment remarkably low.

Write for latest details on WESTON Instruments; as well as a free copy of the 140-page monograph "Suggestions for Teaching from the field of Electricity."

WESTON ELECTRICAL INSTRUMENT CORPORATION

586 Frelinghuysen Avenue, Newark 5, N. J.

Manufacturers of Weston and TAGliabue Instruments

Everyone should
know what your
photocopy machine
can do



You'll get full value
from your investment
—and save dollars
every day—when your
organization makes
full use of your
photocopier.

It's designed to
serve wherever
records must
be duplicated.
It eliminates
costly manual copying, proofreading
—gives you 100% accurate copies of
anything typed, drawn, written, or
printed.



For best results use Kodagraph Contact Paper

It's made by Kodak for use in all types
of contact photocopiers . . . and re-
produces documents in dense photo-
graphic blacks, clean whites—with
new sparkle and legibility. Also, it's
easier, more economical to use. *Order
it . . . and see for yourself.*

Write for a free copy of "Modern
Drawing and Document Reproduc-
tion."

Kodagraph Contact Paper

"THE BIG NEW PLUS" IN THE
OFFICE COPY FIELD

EASTMAN KODAK COMPANY

Industrial Photographic
Division,
Rochester 4, N. Y.

Kodak
TRADE-MARK



WHAT IF TEACHERS' SALARIES WERE ON "BIDS"?

Imagine what drastic changes in the quality of teaching staffs might take place if teachers were required to bid for their jobs.

Beware of cut price bids on sporting goods. When you request these bids you must, of course, consider the service guarantee and integrity of the supplier. A cut rate bid in all probability will not be backed by this intangible, yet valuable, service. When you buy from your sporting goods dealer you can be sure that the price he charges is equitable and fair. It does, of course, carry a legitimate margin of profit so that he can stay in business and render you the service and consultation that you need.

For better value and better service year after year, buy your sporting goods from the dealer who displays the famous NSGA emblem.

NATIONAL SPORTING GOODS ASSOCIATION

LOOK FOR THIS SIGN



HE IS YOUR SPECIALIST IN SPORTS

NEWS

with their national rank, are Antioch, 7.5, 7th; Hiram, 6.7, 10th; Wooster, 5.0, 15th; Marietta, 4.7, 18th, and Mount Union, 4.1, 23d.

Michigan State College Aids Okinawa University

EAST LANSING, MICH. — Michigan State College has accepted an invitation to "adopt" the University of the Ryukyus in its own educational version of the Point Four program of aid to underdeveloped areas of the world.

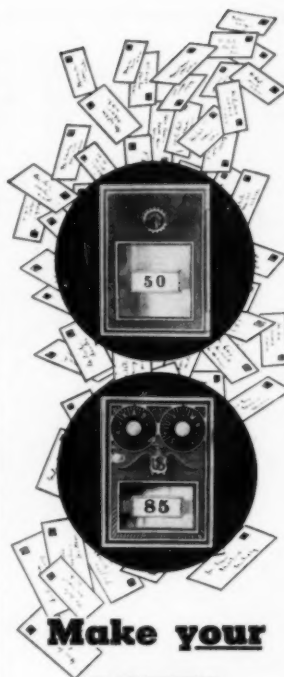
The project is designed to transplant the basic philosophy and programs of America's land-grant college system of education to the newly formed Pacific university, located near Naha, Okinawa. This is an important phase of the U.S. reorientation program designed to provide a stable economy and democratic form of government to the occupied Ryukyus Islands.

The unique undertaking was announced recently by John A. Hannah, president of Michigan State College, and Dr. Arthur S. Adams, president of the American Council on Education. The project is sponsored by the U.S. Department of the Army, with the A.C.E. being responsible for selecting a top American university and cooperating with that institution in carrying out the program. Total cost of M.S.C.'s participation in the project will be borne by the U.S. Department of the Army.

The project will involve the assignment of a resident staff of five M.S.C. professors to the University of the Ryukyus, responsible for setting up and conducting programs in extension and adult education for the people of the Ryukyus Islands in addition to teaching duties in certain fields. The project also calls for an exchange of students between the two institutions and the extension of as many educational facilities and services as possible from M.S.C. to the Okinawa university.

Next for Investigating? Cox Prefers Foundations

WASHINGTON, D.C.—Efforts are being made by Representative Cox of Georgia to launch a congressional investigation of educational foundations on the charge that they are working for communism. Those named by him for investigation are the Rockefeller



**Make your
MAIL
our problem!**

Corbin Mail Handling Equipment is used in the majority of post offices throughout the country. Our years of experience in this field are available to you, without obligation, to help you plan a mail distribution system suited to your specific needs.

For school dormitories or hospital nurses' homes, Corbin Lock Boxes are a low-cost way to handle mail efficiently. The individual boxes are made, with either combination or key-operated locks, in four sizes: 3½" x 5", 5½" x 6¼", 11" x 6¼", 11" x 12½". They can be nested in sections according to the quantity needed and the space available.

For more detailed information—or for a complete plan and elevation of a Corbin Lock Box installation based on your requirements—please use the coupon below.

CORBIN LOCK BOXES

Corbin Cabinet Lock, Wood Products Division,
The American Hardware Corporation,
New Britain, Conn.

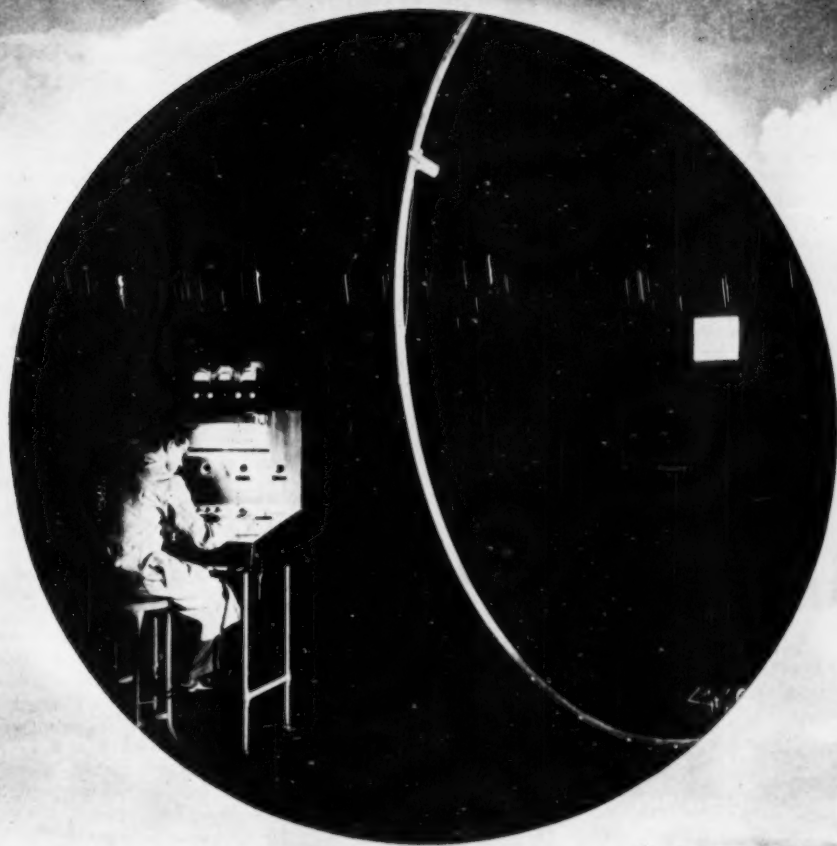
☐ Please send your illustrated pamphlet on Corbin Lock Boxes.

☐ Please send, without obligation, plan, elevation and price for a Corbin Lock Box installation to meet the specifications listed on the attached sheet. (On attached sheet show: number of boxes in each size required; overall dimensions of available space; whether key or combination locks are desired; whether mail will be inserted from front or back of boxes.)

Name

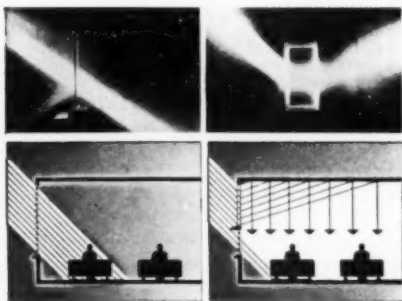
Address

COLLEGE and UNIVERSITY BUSINESS



Operator can set both artificial sun and traveling photocell to any angle or altitude and read resulting light value. All controls work automatically. Readings are taken at high speed and can be recorded electrically.

He makes "Daylight" to order for Daylight Engineering study



Direct sun causes uncomfortable brightness near windows, extreme contrast in other parts of room. Insulux Fenestration directs and spreads daylight to ceiling, keeps brightness at comfortable levels.

What happens in a building when the "sun" shines on a light-directing block is measured by the photocell traveling on this hoop. On the other side of the glass block shown in the picture an artificial sun can be set to simulate daylight conditions in any season in any geographical location at any time of the day.

These tests are part of the research-in-daylight program at the Daylighting Laboratory, Engineering Research Institute, University of Michigan, where special projects are set up to study methods of obtaining best quality daylight . . . how to make it do a better lighting job.

One significant better-daylighting result is the development of Insulux Light Directing Glass Block No. 363. This new block controls light so efficiently that a building virtually "turns with the sun." Entire glass areas transmit free daylight from early morning to late afternoon.

A Daylight Engineer will be glad to show you the benefits the new Insulux Glass Block® can bring to your structures. Just write: Daylight Engineering Laboratory Dept. C.U.9, Box 1035, Toledo 1, Ohio . . . Insulux Division, American Structural Products Company, Subsidiary of Owens-Illinois Glass Co.



INSULUX FENESTRATION SYSTEMS

—by the leaders of Daylight Engineering

NEWS

Foundation, the Guggenheim Foundation, and the Rosenwald Fund.

The congressman alleges that the Rockefeller Foundation "finances persons and organizations trying to get communism into the schools and who talk down America and play up Russia." The Guggenheim Foundation, he describes as one "that is used to spread radicalism throughout the country," and the Rosenwald Fund is one that "aided organizations stirring up class and race dissension in the South." The

Rosenwald Fund is no longer in existence.

Punitive action against the foundations is recommended by Congressman Cox in the form of removing their federal income tax exemption.

Construction Controlled for Fourth Quarter

WASHINGTON, D.C.—On August 3 the National Production Authority placed all construction under the Con-

trolled Materials Plan beginning with the fourth quarter of 1951. Under previous regulations, owners and builders could elect to obtain materials under the Controlled Materials Plan procedures but they were not required to do so.

The new regulations tightened controls over certain types of construction but removed the necessity of applications to N.P.A. for permission to begin construction or to get materials for projects using less than two tons of carbon steel, 200 pounds of copper or any quantity of aluminum, alloy steel or stainless steel.

The new order, NPA Order M-4A revokes NPA Order M-4 and prohibits commencement of construction after September 30 of all types of buildings, structures or projects requiring more than specified quantities of controlled materials unless the prime contractor has an authorized construction schedule and an allotment.

Self-authorization of orders is permitted for less than the specified amounts of these materials, as provided in Direction 1 to CMP Regulation 6.

The new order also prohibits use of copper and aluminum for decorative or ornamental purposes or use of copper for certain other uses in construction.

The regulation provides for appeal, but applications for adjustment or exception on certain cases must be made by filing both form NPAF-24A and form CMP-4C.

Institutional Feeding Included in Short Course

CHICAGO. — "New Management Methods for Maintaining Profits in 1952" has been selected as the general theme of the seventh short course to be sponsored by the University of Chicago's Restaurant Administration Program in the School of Business September 17 to 19.

In keeping with the precedents set by the other six short courses, this course will emphasize practical methods of coping with operating problems, with special emphasis on control of costs through food economies in 1952 operations. Attention also will be given to the rôle of new foods, processes and equipment.

An entire session will be devoted to labor. Leadership methods, motivation, sources, training and technics for



SOLID KUMFORT

in the STUDENT UNION BUILDING
KANSAS STATE TEACHERS' COLLEGE
EMPORIA, KANSAS

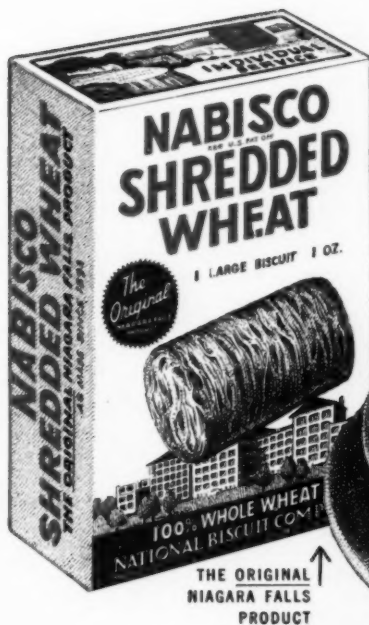


MODEL 426

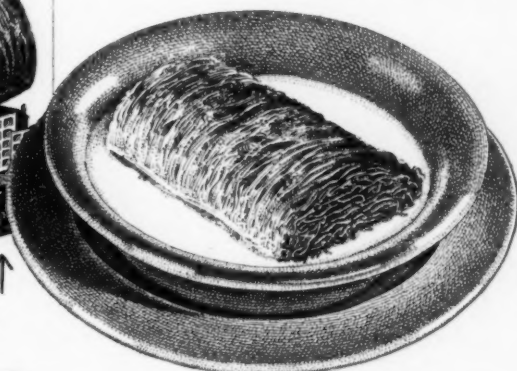
RASTETTER CHAIRS That Fold are shown here in one of the Union Building Conference Rooms. Five rooms of this fine club building are equipped with these beautifully styled chairs. Solid Kumfort Chairs That Fold, in Magnesium or Wood, are used in auditoriums, dining rooms, card rooms, guest rooms or wherever comfortable and stylish chairs are needed. They are easily moved from place to place and stack compactly for storage. Sturdily built for years of service. Write today for more information.



LOUIS RASTETTER AND SONS COMPANY
ESTABLISHED 1887
FINE FURNITURE THAT FOLDS 1326 WALL STREET FORT WAYNE 1, IND.



Cut your food cost...
with Nabisco



NEW! One Biscuit Package

... new idea in cereal service!



Lowest cost per serving

You serve just *one* biscuit of shredded wheat in NABISCO's new individual service package. At about 2¢ per serving it costs you less to buy and serve than *any* package of two biscuits!



Save sugar and cream, too

Most people tend to use much more cream and sugar for two biscuits—especially when they eat them one at a time. With NABISCO's new package, only the usual amount is used. That's another important saving!



The right portion—no waste

Each one-biscuit serving weighs just *one ounce*—the amount most people eat at home, and the amount the government recommends. Why serve more, when it's usually wasted? No leftovers!



The old-time favorite!...

Serve the large shredded wheat that is preferred in your patrons' homes! NABISCO has the *right* product, in the *right-size* portion, in the *right* package, and at the *lowest cost per serving*. Better stock up now!

A PRODUCT OF NATIONAL BISCUIT COMPANY

NATIONAL BISCUIT COMPANY, Dept. 39, Niagara Falls, N. Y.
Please send your booklet "Around the clock with NABISCO."



Name _____ Title _____
Organization _____
Address _____ City _____ State _____

NEWS.....

increasing employe productivity will be discussed. Practical cases covering various kinds of operations, such as full service, cafeterias, industrial feeding, and institutional feeding, will be featured.

Rutgers Raises Its Room, Board Rates

NEW BRUNSWICK, N.J.—Increases in residence hall rentals and table board fees at the men's colleges and

the New Jersey College for Women to meet rising costs were announced recently by Rutgers University.

Dormitory fees at both the men's and women's colleges were increased from \$110 to \$125 per person per term, effective July 1. Table board at the College for Women will be \$200 per person per term instead of \$175.

Cafeteria food prices at the university commons on the men's college campus will be adjusted in approximately the same proportion.

Dismissed Cadets Welcome at Three N.Y. Catholic Schools

NEW YORK. — Francis Cardinal Spellman announced recently that he had asked the presidents of three Catholic colleges for men in the Archdiocese of New York to accept any of the cadets dismissed from the United States Military Academy at West Point who apply for admission.

Ninety cadets were dismissed from the academy for cheating on examinations, but Cardinal Spellman has stated that "To err is human; to forgive, divine," and if the cadets desire to enroll at Fordham University, Manhattan College, or Iona College they should be admitted. The presidents of the three colleges have consented to Cardinal Spellman's request.

Selective Service officials in Washington have stated that the dismissed cadets must register for the draft within 30 days if they are not already registered. Those who entered the academy before they were 18 presumably are not registered since they were regarded as being in military service.

Acceptance by the three Catholic colleges, or any institution willing to admit them, would qualify cadets to ask deferment as students until the end of the academic year ending next June. If such deferment were granted by their local boards, further deferment would be based on scholastic standings or scores in the aptitude test to be given again to college students next year.

7,600,000 Vets Trained Under G.I. Bill to Date

WASHINGTON, D.C. — According to the Veterans Administration, the seven-year-old G.I. education and training program closed its doors on July 25 to most World War II veterans who have not actually started training. Under the law, most veterans must have started their courses and been in actual attendance on that date in order to continue, unless they had interrupted their courses for the summer vacation or for other reasons beyond their control.

One such interruption would be the case of a veteran who has had G.I. training and then returned to active military duty. He will be permitted

Wax Protects CORK FLOORS






HUNTINGTON LABORATORIES, INC.
Huntington, Indiana • Toronto, Canada

☐ Please send Neo-Shine Wax sample.
☐ Send free copy of "101 Floor Hints" booklet. ☐ Have salesman call.

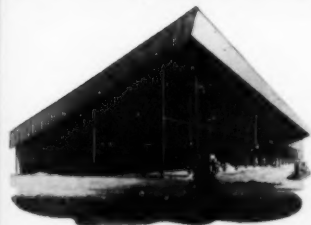
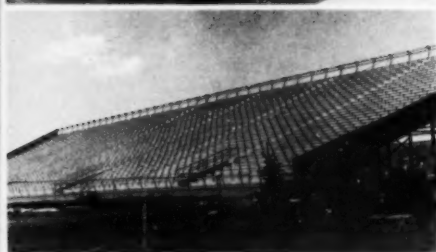
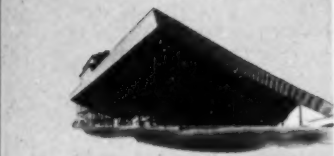
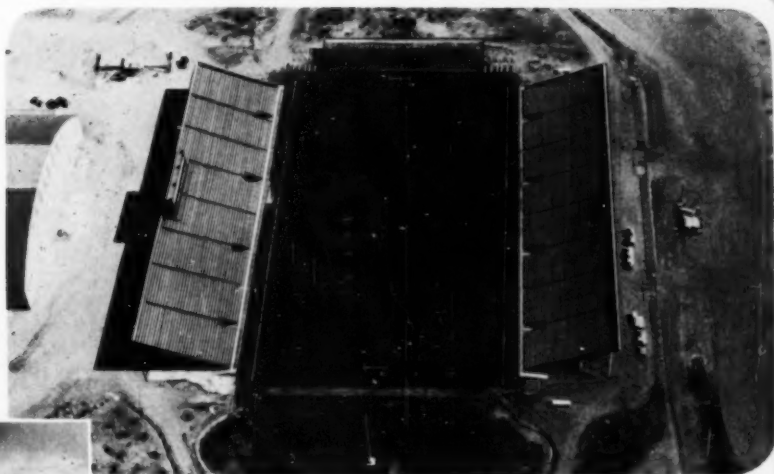
NAME _____

ADDRESS _____

CITY _____ STATE _____

Now—15,000
safe and
comfortable
stadium seats

for the *University*
of *Wyoming*



Forger and Brasley, Architects. Laramie, Wyo.

PITTSBURGH • DES MOINES

Steel Deck **GRANDSTANDS**

"Out where the West begins" is a fine new stadium at the University of Wyoming—with permanent, sturdy Steel Deck Grandstands by Pittsburgh-Des Moines. These stands are unaffected by climatic changes or extremes of weather, and will remain new-looking for a lifetime with simple paint maintenance. Let us consult with you now on your school's future outdoor seating needs. Write, without obligation.

PITTSBURGH • DES MOINES STEEL CO.

Plants at PITTSBURGH, DES MOINES and SANTA CLARA

Sales Offices at:

PITTSBURGH (25)	1454 Neville Island	DES MOINES (8)	959 Tuttle Street
NEW YORK (17)	Room 944, 270 Broadway	DALLAS (1)	1263 Praetorius Bldg.
CHICAGO (13)	1262 First National Bank Bldg.	SEATTLE	966 Lane Street
	SANTA CLARA, CAL.	685 Alviso Road	



**full of
Hot
Air**

... and lots of it **INSTANTLY**
makes **ELECTRIC-AIRE** the
fastest Hand Dryer in the field



It is the **VOLUME** of **INSTANTLY** hot air that makes a dryer fast and efficient. Electric-Aire dryers deliver almost double the air volume of other types.

NOTE THE OTHER EXCLUSIVE FEATURES THAT HAVE MADE ELECTRIC-AIRE THE LEADER IN THE FIELD

- ✓ Automatic Louvers protect heater from vandalism
- ✓ Low speed motor insures long life and quiet operation
- ✓ Enclosed switch points insure safety and freedom from "frozen" contacts
- ✓ Entire mechanism floats in rubber—provides protection against shocks
- ✓ Narrow design—only 7" wide—requires minimum space
- ✓ Backed by finest guaranty in the industry

Keeps washrooms attractively clean and SAVES 90% over trowel expense.

HAIR DRYERS

- ✓ Dries thoroughly in 3 minutes—helps prevent colds.
- ✓ Four types of switch controls including coin operated.



ENGINEERED, MANUFACTURED and DISTRIBUTED by **ELECTRIC-AIRE ENGINEERING CORP.**

ON REQUEST . . .

FREE . . . Illustrated Catalog and list of users. Electric-Aire is the Leader in the Field! Write for your catalog now!

**ELECTRIC-AIRE
ENGINEERING CORP.**

Dept. D, 204 W. Jackson Blvd.
Chicago 6, Ill. • Phone WEbster 9-4364

NEWS

to resume his training within a reasonable period after his separation or discharge from service.

Veterans not affected by the July 25 cut-off date include those discharged after July 25, 1947. These veterans have four years from their date of discharge in which to start courses of G.I. bill training.

About half of all World War II veterans—or 7,600,000 out of 15,200,000—have, at some time or another, taken G.I. bill training during the seven years and one month the program has been in effect. Of the 7,600,000 who have had training, slightly more than 1,500,000 actually are in G.I. bill training today or have interrupted their training for the summer vacation. Only 500,000 of the eligible 15,200,000 veterans have used up all of their entitlement to education or training.

Those permitted to pursue post-cut-off date G.I. education and training will have to meet certain conditions in order to remain in training, the Veterans Administration said. Among them are the following:

They will be expected to pursue their courses until completion, except for conditions which normally would cause interruption by any student. Once they complete or discontinue their G.I. bill courses after the cut-off date, they will not be permitted to start other courses.

After the deadline, they will be permitted to change their educational objectives only while in training, and then only for reasons satisfactory to V.A. Pre-cut-off date change of course procedures—which gave a veteran the right to make a first change merely by applying for it—will no longer be in effect.

The program so far has cost \$12.6 billion, two-thirds of which, or \$8.6 billion, has gone to the veterans in the form of subsistence allowances. Of the remainder, \$3.2 billion has been paid to schools for tuition, and another half billion was spent for books, supplies and equipment for veteran-trainees.

The average veteran had 40 months of G.I. eligibility coming to him, but he used only 15 months in training, V.A. said.

The cut-off date for training does not apply to Public Law 16 training for disabled veterans, nor does it affect the G.I. loan program.

Antioch College Raises All Employees' Salaries

YELLOW SPRINGS, OHIO.—In spite of reduced enrollment and higher operating costs, Antioch College will pay its staff approximately 10 per cent higher salaries next year. This raise, effective July 1, applies to all personnel, both academic and nonacademic, and is in addition to various merit increases and promotions.

Faculty salaries have been increased a flat amount per person without regard to the rate of pay. Thus, while the average increase is 10 per cent, the individual increases run as high as 15 per cent under this plan. The purpose of the plan is to provide the greatest increases for the lowest paid personnel.

Nonfaculty employees have received a straight 10 per cent increase.

Student tuitions have been raised for the 1951-52 academic year, but these increased revenues are not expected to offset the higher operating costs.

Restrictions Are Eased on Laboratories

WASHINGTON, D.C.—On August 6 the National Production Authority amended NPA Order M-71 to liberalize priorities assistance to scientific and technical laboratories.

The new order permits institutions, companies and government agencies operating more than one laboratory to treat each laboratory separately in applying for priorities aid. The order also eliminates references in the order to NPA Regulation 4 (MRO) and replaces them with references to Controlled Materials Plan Regulation 5 (maintenance, repair and operation, MRO) which superseded the former on July 6.

Drug Injection Fatal to Two University Employees

VERMILLION, S.D.—Two employees of the University of South Dakota died August 15 from an overdose of the wrong drug, accidentally injected into them during a pain-relief experiment.

Jack Clifford, 30, a laboratory technician, and Mrs. Ardy Pearson, 26, a secretary, were the "human guinea pigs" who lost their lives when Dr. L. F. Michalek, 28, picked up the wrong bottle when he gave the injections.

Make a Permanent Capital Investment in . . .



FIREPROOF

"STEELAB"

LABORATORY FURNITURE



"Our requirement for laboratories is permanence with a minimum of maintenance. For nearly twenty years lead-coated STEELAB furniture has stood up well under the most trying conditions in our laboratories. Other laboratories which we have inspected show severe rusting and deterioration where lead-coated STEELAB furniture was not used. Here under the same use, little rusting or deterioration is noticeable". *Statement from an administrator of a world-famous university.*

STEELAB Furniture is Manufactured Only By
LABORATORY FURNITURE COMPANY, INC.

Old Country Road, Mineola, Long Island, N. Y.

LITERATURE WILL BE MAILED ON REQUEST.

*some of the 35,000
STEELAB installations . . .*

BOWLING GREEN STATE
COLUMBIA UNIVERSITY
CORNELL UNIVERSITY
DOMINICAN REPUBLIC
ILLINOIS UNIVERSITY
LEHIGH UNIVERSITY
M. I. T.
N. Y. ARTS & SCIENCES
NEW YORK UNIVERSITY
NORTH CAROLINA STATE
PITTSBURGH UNIVERSITY
RENSSELAER POLYTECH
RUTGERS UNIVERSITY
STEVENS INSTITUTE
TRIPLE CITIES COLLEGE
UNIVERSITY OF HAWAII
UTICA COLLEGE
WESLEYAN

NEWS.

GIFTS AND BEQUESTS

- **University of Notre Dame** Foundation, established in 1947 to coordinate gifts to Notre Dame, recently announced the launching of a "Father Cavanaugh Testimonial Fund" with a goal of \$3,000,000 by July 1952. Father Cavanaugh, fifteenth president of Notre Dame, is in the last year of his second and final term of office.
- **University of Maine** has been successful in its campaign to obtain \$900,000 for construction of a Memorial

Student Union building, according to a recent announcement by Raymond H. Fogler of New York, who was campaign chairman.

- **Amherst College** announced receipt of bequests of approximately \$3,500,000 by the wills of Isabel J. Turner and her brother, Dr. William J. Turner, of Montclair, N.J.

- **Hamilton College**, Clinton, N.Y., announced receipt of a gift of 231 acres of land adjoining the college's 160 acre campus. It was given by the family of

the late Sen. Elihu Root, long chairman of the Hamilton College trustees.

- **Duke University** has obtained \$7,500,000 of its \$8,650,000 development goal for 1950-51. The goal is the first phase of Duke's 10 year program to raise \$12,000,000.

- **Rensselaer Polytechnic Institute** received \$1,090,417 in gifts and bequests during the past year, according to Dr. Livingston W. Houston, president of the institute in Troy, N.Y.

- **Haverford College** was bequeathed \$2,000,000 by the late William Pyle Philips, New York attorney, banker and corporation director. The gift is the largest in the history of the Philadelphia college.

- **Yale University** recently announced a total of \$10,000,000 in gifts, bequests and contributions from alumni since July 1950.

- **University of Dubuque** announces two recent bequests: \$23,037 from the late Zella G. Chaloupka of Dubuque, Iowa, and \$14,691 from the estate of Nathan P. Hull of Yakima County, Washington.

- **Norwich University**, Northfield, Vt., has received a gift of \$100,000 from Harry W. Patterson of Buffalo, N.Y.

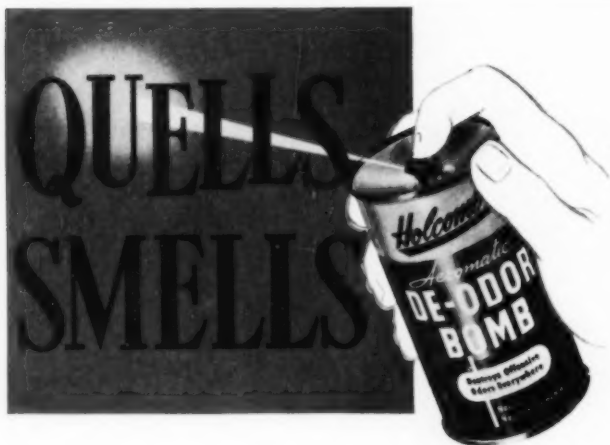
- **Northwestern University** will get the bulk of a \$3,867,478 estate left by Mrs. Elsie Eckstein. The fund is to establish a musical endowment program at the university.

- **Trinity University**, Hartford, Conn., announced that it had received \$2,641,000 in contributions during the past year.

- **Vassar College** received \$400,000 from Mrs. Morris Hadley, president of the Rubicon Foundation and chairman of the Vassar board of trustees. The gift will help the college meet an operating deficit for the last academic year and an anticipated deficit for 1951-52, and will aid in permitting an increase in faculty salaries.

- **Barnard College** recently received two gifts, totaling \$35,000, for the Development Fund goal of \$10,000,000. One of the gifts was one of \$25,000 from the *New York Times* and the other a gift of \$10,000 from the Vincent Astor Foundation.

- **Albion College**, Albion, Mich., has received three substantial gifts since the first of the year, according to an announcement by W. W. Whitehouse, president. The gifts include real estate received from Dr. and Mrs. Harvey



- Just press the nozzle . . . and odors leave.

It's as fast as that with the Holcomb De-Odor Bomb. This easy-to-operate deodorant quickly clears any room of unpleasant odors—leaves only fresh, clean air.

Simple fingertip pressure shoots out a fine spray that actually envelops and destroys offensive odors. And, it's safe to use anywhere.

There's nothing to stain or burn—no toxic ingredients to harm you.

The new De-Odor Bomb is one more development from the Holcomb Research Laboratories which concentrate on cutting your cleaning and maintenance costs.

For every cleaning need, standardize on Holcomb—your one source, your dependable source, for scientific cleaning materials.



Research Laboratory and Factory
1601 Barth Avenue, Indianapolis 7
Branches: New York 18 and Los Angeles 21.

J.I. HOLCOMB
MANUFACTURING COMPANY

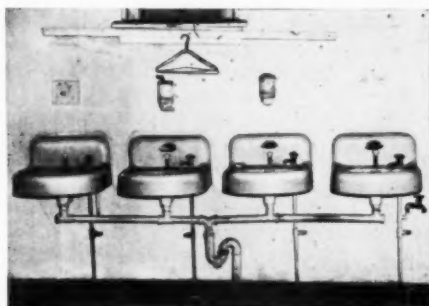
Scientific cleaning materials

Look what remodeling can do for rest rooms . . .

when you install **AMERICAN-Standard** plumbing fixtures

● These rest rooms in the Merchants and Manufacturers Building at the State Fair Grounds, Louisville, Ky., are excellent examples of old, unsanitary wash rooms which have been made modern, sanitary and attractive to patrons by the installation of beautiful, gleaming American-Standard plumbing fixtures.

And these same high quality fixtures can do the same job for your rest rooms. Whatever your requirements—whether your rest rooms have a light or heavy volume of traffic—you'll find in the complete American-Standard line exactly the right equipment for your installation. Ask your plumbing contractor for information about them and write for a free copy of our Better Rest Room Guide to **American Radiator & Standard Sanitary Corporation**, Dept. CB-9, Pittsburgh 30, Pa.



BEFORE

These before and after pictures of the men's room show what a vast difference remodeling with attractive American-Standard fixtures makes. Old lavatories have been replaced with handsome, splash back Lucerne lavatories, and in the adjoining room, Expello urinals have been installed. Both these fixtures are made of genuine vitreous china for long wear and easy cleaning, and are wall-hung to facilitate quick, efficient floor cleaning.

AFTER



SANISTAND URINAL FOR WOMEN

This view of the women's rest room shows the Sanistand fixture—the new American-Standard urinal for women. This new fixture, which is designed to offer women the same convenience and sanitation the standing urinal does men, is constructed entirely of easy-to-clean genuine vitreous china. Its variety of attractive colors blend or contrast with any scheme. The slanted rim, extended lip, ample bowl and outlet encourage cleanliness, make rest rooms easier to clean and keep clean. When used in modernization work, the Sanistand urinal can usually replace a water closet in the same compartment. It is available with either hand or foot operation and features the quiet, efficient siphon vortex flushing action with jet.

AMERICAN-Standard

First in heating . . . first in plumbing



Serving home and industry: AMERICAN STANDARD • AMERICAN BLOWER • CHURCH SEATS • DETROIT LUBRICATOR • KEWAUNEE BOILERS • ROSS HEATER • TONAWANDA IRON

NEWS.

N. Ott of Buffalo, N.Y., valued at \$1,000,000; \$500,000 from the Kresge Foundation, and \$40,000 in cash and property valued at \$12,000 by a bequest from the late Mrs. Sarah Parmenter of Albion.

- **Yale University** has established the Henry L. Stimson Fund for research in world affairs, as the result of an initial gift of \$500,000 from an anonymous donor.

- **Pennsylvania College for Women** recently received a gift of \$125,000

from the A. W. Mellon Educational and Charitable Trust for the appointment of a nationally known composer and a concert pianist to the music faculty. The grant is for a five-year period and involves the recording of important historical musical works for use in schools and colleges throughout the country.

- **State University of New York** announced the formation of a privately financed research foundation and the receipt of its first grant of \$40,867 for

a study on why certain trees lose their bark. The newly formed foundation is required to restrict its activities to those areas approved by the State University, according to Dr. Alvin E. Eurich, president of the university.

NAMES IN THE NEWS

Granville K. Thompson, former business manager of Graceland College, Lamoni, Iowa, has been named successor to **George E. Van Dyke** as specialist for college business management in the division of higher education, U.S. Office of Education. Mr. Van Dyke resigned to accept appointment as assistant controller of George Washington University, Washington, D.C. Mr. Thompson, who received his M.B.A. degree from the University of Chicago in 1942, did graduate work in the fields of accounting, hospital administration, and college business management.

John B. Rork, purchasing agent of the University of Denver, has been appointed consultant for the U.S. Office of Education in the civilian education requirements section of the higher education program. One of his functions will be to develop estimates on equipment needs in higher education that can be used in obtaining allocations of material from N.P.A.

James Cuthbertson, formerly superintendent of buildings and grounds at Lake Erie College, Painesville, Ohio, has been appointed assistant business manager of Knox College, Galesburg, Ill., where he will be in charge of maintenance and personnel. Mr. Cuthbertson is a graduate of Ardrossan Naval Academy in Scotland and attended Glasgow University, coming to the United States following World War II.

J. Paul Slaybaugh, director of admissions at Westminster College, Fulton, Mo., has been appointed to the presidency of Wesley Junior College at Dover, Del. He will succeed the **Rev. Oler Ammon Bartley**, who has accepted appointment as superintendent of the Dover district of the Methodist Church.

Nicholas F. Wessell, personnel director of the Factory Mutual Engineering Division, has been appointed associate director of personnel for Harvard University. The personnel office at Harvard administers the personnel program for its approximately 4500 em-



SHOPPING FOR EXHIBIT CASES ?

BUYERS of exhibit cases everywhere are choosing Michaels "Time-Tight" Cases because they are tops in design, quality, structural features, appearance and usefulness.

Michaels cases offer Innerlocking Frames, an exclusive feature; fully mitered intersections; no screws exposed on face of frames, and other structural advantages.

MUSEUM CASE DIVISION OF

The MICHAELS ART BRONZE CO., Inc., 240 Scott St., Covington, Ky.

Manufacturers since 1870 of many products in Bronze, Aluminum and other Metals

These cases are designed for maximum visibility; to enhance the appearance of exhibits; to eliminate handling and theft as well as the ingress of dust, vermin and moisture. They are made in a wide variety of styles (table, aisle, wall, corner, suspended and recessed) and in any practical size to take care of virtually all exhibit requirements. If it is necessary to meet specific needs, Michaels will design and build special cases to your specifications. "Time-Tight" Cases are used extensively in museums, art galleries, libraries, universities, colleges, schools, science laboratories and various related types of display rooms.

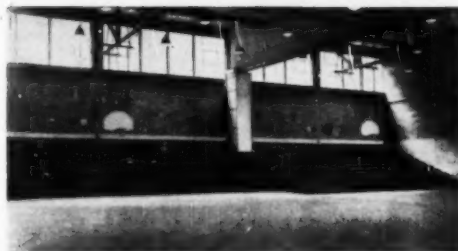
Write for literature which contains complete information.

MANKATO HIGH SCHOOL
MANKATO, MINNESOTA

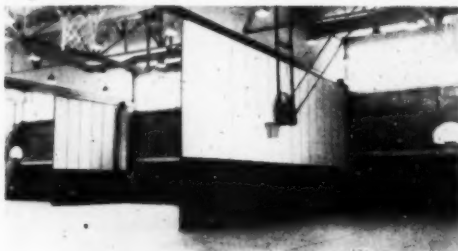
PASS AND ROCKEY, ARCHITECTS
MANKATO, MINNESOTA
HAGSTROM CONST. CO.
GENERAL CONTRACTOR



Horn Folding Partitions and
Horn Folding Gymseats Insure
Maximum Gym Space.



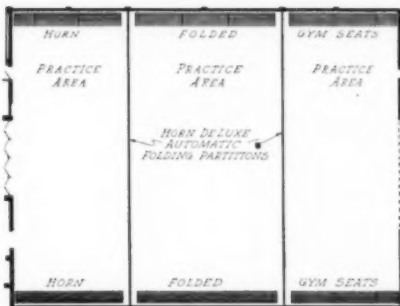
HORN PARTITIONS CLOSED AND SEATS EXTENDED



HORN GYMSEATS FOLDED AND PARTITIONS OPEN



NOTE COMPACTNESS OF HORN EQUIPMENT

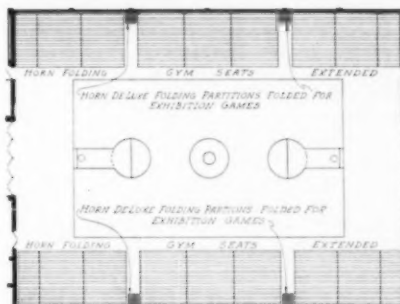


HORN DELUXE AUTOMATIC FOLDING PARTITIONS
with Pass Doors offer three independent practice gyms.
HORN FOLDING GYMSEATS with their smooth folded
surface insures safety and maximum space.

HORN PLAT-FOLD PLATFORM

Whatever your platform requirements, the compact **HORN PLAT-FOLD PLATFORM** will save space, time and labor.

WRITE FOR FREE FOLDER



FOR THE BIG GAME . . . Horn Folding Gymseats with their "Chair Comfort" dimensions are simple to operate and maintain and offer maximum seating capacity. For the finest, always specify **HORN**.

THERE IS A HORN REPRESENTATIVE IN YOUR LOCALITY. FOR COMPLETE DETAILS, WRITE DEPT. G. THERE IS NO OBLIGATION.

HORN BROTHERS COMPANY
FORT DODGE, IOWA *Established 1909*
YOU, TOO, CAN AFFORD THE BEST.

NEWS

ployes, including the administration of pension and insurance programs.

George H. Watkins, assistant to the secretary-treasurer of the Illinois Commercial Men's Association, has been named secretary of the University of Chicago in general charge of development and public relations, according to an



George H. Watkins

announcement by Lawrence A. Kimpton, chancellor of the university. This is the first appointment made to an administrative post since Mr. Kimpton became chancellor last April.

Harvey M. Rice, president of State Teachers College at Oswego, N.Y., has been named president of the State University College for Teachers at Buffalo. The appointment will become effective December 1, when Dr. Rice will succeed **Dr. Harry W. Rockwell**, who recently reached retirement age.

Charles A. Kuntz, controller of Ohio State University, has been elected president of the Columbus Control of the Controllers Institute, whose headquarters are in New York City.



Charles A. Kuntz

Harold T. Wiebe, professor of biology at Taylor University in Upland, Ind., has been appointed acting president until a successor to the **Rev. Clyde W. Meredith** is appointed.

Harry D. Wiser, district superintendent of the Armijo Union High School, Fairfield, Calif., has been appointed president of Vallejo College, Vallejo, Calif.

Sister Mary John Michael, B.V.M., a member of the faculty of Mundelein College, Chicago, has been named to succeed **Sister Mary Josephine** as president of the college. Sister Mary Josephine, who took office in 1945, retires in accordance with Roman Catholic law permitting only six consecutive years of service.

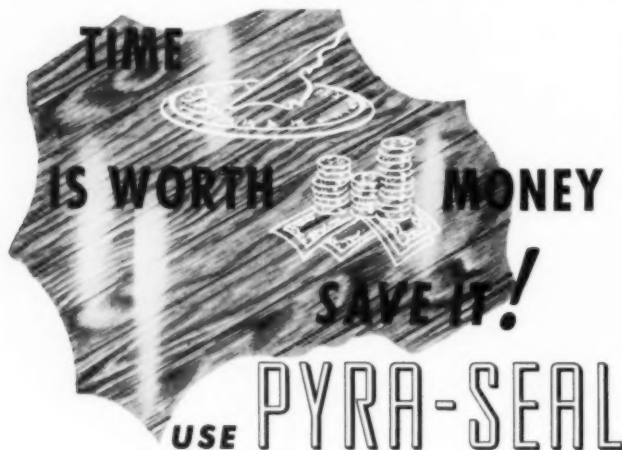
Rev. F. Orion Mixon, pastor of the Tabernacle Baptist Church of Raleigh, N.C., has succeeded **B. D. Bunn** as president of Chowan College, Murfreesboro, N.C. His appointment became effective September 1.

Duke K. McCall, executive secretary of the Southern Baptist Convention, has been appointed president of Southern Baptist Theological Seminary at Louisville, Ky. He succeeds the late **Rev. Ellis A. Fuller**.

Rev. Herman Hauck, S.J., professor of English at the University of San Francisco, has been appointed president of the University of Santa Clara to succeed the **Rev. William Charles Gianera, S.J.**

John I. Kirkpatrick, secretary and treasurer of the board of trustees of Lehigh University, has been appointed controller of the University of Chicago. Mr. Kirkpatrick, whose appointment is effective September 15, succeeds **Harvey C. Daines**, who retired June 30.

Dr. William G. Van Note will be the ninth president of Clarkson College of Technology, Potsdam, N.Y., when he assumes that post on October 1. Dr. Van Note, director of the department of engineering research and professor of metallurgy at North Carolina State College, will succeed **Dr. Jess H. Davis**,



A 2 COAT FLOOR FINISHING JOB IN 12 HOURS

PYRA-SEAL saves time when floors require sealing, because it's a quick-drying seal . . . yet it leaves a tough, beautiful, long-lasting finish. That's dollars saved! Plus getting floors into service sooner.

Also, PYRA-SEAL cuts down on maintenance costs because it's so easy to keep clean. That's more dollars saved! Only PYRA-SEAL offers ALL these advantages:

- **QUICKER DRYING**—Dries in half the time . . . your floors are back in service sooner.
- **60% to 80% MORE WEAR**—proved by tests with Taber Abrasers (the official precision instrument to determine wear and abrasion resistance.)
- **HIGHER GLOSS** yet maintains celebrated slip resistant safety.
- **EASIER TO APPLY AND MAINTAIN**—No lap marks; fewer rubber marks; does not rubber burn. Can be scrubbed without damage. A stronger, tougher, longer-wearing finish.

PYRA-SEAL dries to touch in LESS than 2 hours. Can be steel-waxed and given another coat after 4 to 5 hours drying time.



Write today for detailed information.

VESTAL INC. 4963 MANCHESTER ST. LOUIS 10, MO.



There never was a book like this because there never was a product like this. The Wakefield Ceiling is a completely integrated means of providing total luminous-acoustical environments, produced in accordance with your specifications at the Wakefield factory, shipped complete to

the job and installed in its entirety by a Wakefield-licensed electrical contractor. To know about the Wakefield Ceiling you must read this book. A letter on your business stationery will bring you a copy, free of charge. Write to *The F. W. Wakefield Brass Company, Vermilion, Ohio.*

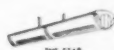
Wakefield Over-ALL Lighting



THE GRENADE



THE COMMODORE



THE STAR



THE WAKEFIELD CEILING



NEWS.

who will become president of Stevens Institute of Technology, Hoboken, N.J.

Dr. George Frederick Zook, retired president of the American Council on Education and a former U.S. Commissioner of Education, died August 17 at his home in Arlington, Va. From 1925 to 1933 he was president of the University of Akron. Dr. Zook was 66 years of age.

Ray Amerman, purchasing agent of Wayne University, Detroit, died recently as the result of a heart attack.

DIRECTORY OF ASSOCIATIONS

Association of College and University Business Officers

Central Association

President: Laurence R. Lunden, University of Minnesota; secretary-treasurer: C. C. De Long, University of Illinois.

Convention: April 20-22, 1952, Ohio State University, Columbus.

Eastern Association

President: D. L. Rhind, Massachusetts Institute of Technology; secretary-treasurer: Irwin K. French, Middlebury College, Middlebury, Vt.

Convention: Dec. 9-11, Chalfonte-Haddon Hall, Atlantic City, N.J.

Southern Association

President: Gladys Barger, Lenoir-Rhyne College; secretary-treasurer: Gerald D. Henderson, Vanderbilt University.

Western Association

President: Nelson Wahlstrom, University of Washington; secretary-treasurer: James M. Miller, University of California, Berkeley.

American Association

President: Glenwood E. Jones, Shaw University; secretary: L. H. Foster Jr., Tuskegee Institute.

Convention: May 1952, Howard University, Washington, D.C.

Association of College Unions

President: Frank Kuenzel, University of Michigan; secretary-treasurer: Edgar A. Whiting, Cornell University; editor of publication: Porter Butts, University of Wisconsin.

Convention: April 1952, Oklahoma A. & M. Union, Stillwater, Okla.

Association of Physical Plant Administrators of Universities and Colleges

President: Walter W. Kraft, University of Oklahoma; secretary-treasurer: A. F. Gallistel, University of Wisconsin.

Convention: May 1952, University of Michigan.

American College Public Relations Association

President: Stewart Herral, University of Oklahoma; secretary-treasurer: James W. Armsey, Illinois Institute of Technology, Chicago.

College and University Personnel Association

President: Boynton S. Kaiser, University of California; secretary-treasurer: Ruth Harris, University of Illinois.

National Association of College Stores

President: George Racine, Northwestern University; executive secretary: Russell Reynolds, Box 58, 33 West College Street, Oberlin, Ohio.

Convention: 1952, Miami.

National Association of Educational Buyers

President: Jamie R. Anthony, Georgia Institute of Technology; executive secretary: Bert C. Ahrens, 45 Astor Place, New York, N.Y.

Convention: May 1952, Washington, D.C.



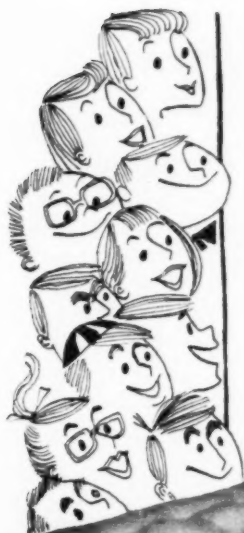
Kewaunee QUALITY all the way

You see it in every piece of Kewaunee laboratory equipment—the very finest quality in design, materials, construction and finish. Clean, simple, functional design that speeds laboratory work. Selected woods, hardware and other materials for lasting service. Husky construction with careful workmanship in every detail. Handsome, wear-resistant finishes. Kemwel Tops exceptionally resistant to water, acids, alkalis and solvents. Top to bottom, inside and out, from start to finish—Kewaunee custom quality all the way. And it's all yours at no extra cost. Write for descriptive literature.

Kewaunee Mfg. Co.

J. A. Campbell, President
5069 S. Center Street • Adrian, Michigan

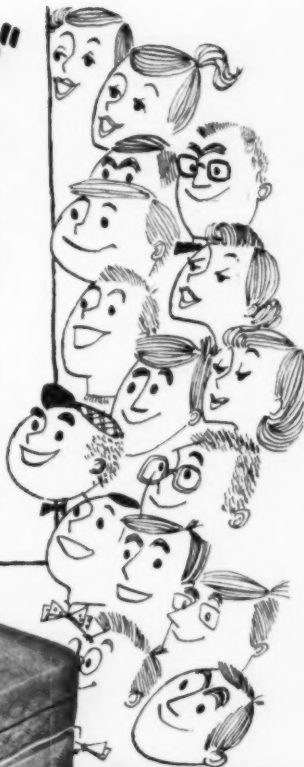
Representatives in
Principal Cities



How the "NEW SLEEP" can benefit your students

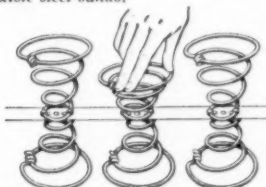
You've read about the "New Sleep." It's based on the principle that a mattress should provide *support* as well as *comfort*! The "New Sleep" brings your students the sort of rest that enables them to do better work because they get more rest and more *healthful* rest.

The "New Sleep" is achieved through an entirely new kind of sleep *equipment*, materials, and design—even new engineering principles. The "New Sleep" is exclusive with Englander, and available to your students in the Englander Super Bodyguard Red-Line* Mattress with companion box spring.



A NEW idea in mattresses makes the "New Sleep" a reality

It's our exclusive RED-LINE* principle of *independent spring action*! Unlike ordinary mattress springs, which may be held together by cloth sacks or tied together at top or bottom by wires or strings, Super Bodyguard's springs are *locked only at the center* by flexible steel bands.



These bands divide Super Bodyguard into two parts or layers. In the upper part, springs are left free to act independently of one another, are much more *responsive* to changing body positions. The result is more comfort—the extra comfort of the "New Sleep!" In the lower part, however, Super Bodyguard's springs act as a unit, support the sleeper with exceptional firmness. It's the extra support of the "New Sleep!"

*TM The Englander Company, Inc.

Englander
SLEEP PRODUCTS

Built to last ... the Englander dormitory bed!

Business managers and purchasing agents, in increasing numbers, have been choosing the Englander dormitory bed because it's so neatly, simply, sturdily put together. Durable enough to take years of punishment!



New catalog available. Send for it and get the story of Englander's complete line of institutional sleep equipment. If you have any special requirements, write us in detail about them. They will be given special attention.

*There's more to the story.
Get it from your institutional supply dealer.*

The Englander Company, Inc.

Contract Department, Space 360, Merchandise Mart Plaza, Chicago 54, Illinois

*for Educated Floors
Outwears Ordinary
wax finishes 3-1*



STAPLES Hot Wax Process MACHINES

Gives you the right start for an economical floor maintenance program, using hard waxes broken down under heat. Makes a surface that withstands scuffing, unexcelled for wood, linoleum, cork or cement. Eliminates tedious hand labor.

Penetrates • Protects
Efficient • Durable • Economical
Send for Complete Information

For assured results, try
#30 HOT PROCESS WAX CEMENT KOTE
SEAL KOTE GYM SEAL SEAL QUICK

Model 12
12" diameter, with 13" bristle spread.

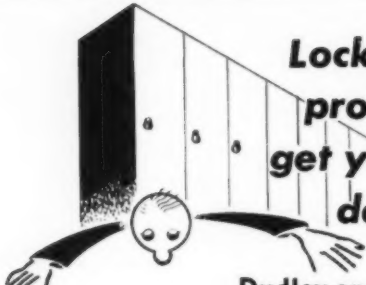
Also available, Model 25,
15" diameter, 16" bristle spread.



H. F. STAPLES & CO. INCORPORATED
MEDFORD, MASSACHUSETTS

Makers of superior
Floor Products
since 1897.

**Locker
problems
get you
down ?**



**Dudley can help . . .
and it needn't cost you a cent**

Master-Charted
RD-2



There's a Dudley representative near you who's an expert on school locker problems. He'll be glad to help you without cost or obligation. Send your request and we'll have him call next time he's near you.

Write for free Catalog
Folder of sturdy,
school-tested
Dudley Locks



Master-Keyed
P-570

**DUDLEY LOCK
CORPORATION**

Dept. 922, Crystal Lake, Illinois

CLASSIFIED ADVERTISING

POSITIONS WANTED

Administrative—Attorney desires position as administrative officer or business manager in a college or large school; considerable experience in investments and finances; modest salary acceptable. Write Box CW64, COLLEGE AND UNIVERSITY BUSINESS.

Business Officer—Master's Degree in Business Administration; 16 years' progressively responsible administrative work, including financial control, investments, construction and maintenance of buildings; available now for responsible position. Write Box CW63, COLLEGE AND UNIVERSITY BUSINESS.

College Business Officer—B.A., M.B.A., with 20 years' business administrative experience; desires position of responsibility in educational field; available almost immediately; for resume of experience and qualifications, write Box CW64, COLLEGE AND UNIVERSITY BUSINESS.

Foods Manager—B.S. Degree, Hotel Administration; 3 years experience; extensive background in all areas related to foods production and service; New York City or vicinity; references; available September 1. Write Box CW65, COLLEGE AND UNIVERSITY BUSINESS.

Food Service Director—Now employed; 5 years' with well known university; thoroughly experienced menu planning, food and supplies purchasing, supervision all operations; chef; baker; age 40. Write Box CW65, COLLEGE AND UNIVERSITY BUSINESS.

POSITIONS OPEN

Engineer—Desire graduate architectural or civil engineer; under 40 years of age; must be a good draftsman, and have some experience in construction and handling men; permanent position for right party in growing college; references required. Write Box CO53, COLLEGE AND UNIVERSITY BUSINESS.

Graduate Engineer—With or without experience for position as Assistant Superintendent of Buildings and Grounds in a large eastern university; state full particulars and salary desired. Write Box CO54, COLLEGE AND UNIVERSITY BUSINESS.

The rates for advertisements are: 10 cents a word; minimum charge, \$2.50.

Forms close 25th of month
preceding date of issue

Address replies to

**COLLEGE AND UNIVERSITY
BUSINESS**

919 N. Michigan Ave., Chicago 11, Ill.

COLLEGE AND UNIVERSITY BUSINESS



QUIET

...often the difference between good or slow progress



No student can be expected to do his best work in classrooms where unchecked noise interferes with hearing ... makes attention and concentration difficult ... creates an atmosphere of fatiguing tension. The working efficiency of instructors, too, is impaired by bad acoustical environment.

That's why scores of colleges and universities all over the country have installed modern Acousti-Celotex Sound Conditioning! A sound-absorbing ceiling of Acousti-Celotex Tile instantly checks unwanted noise in classrooms, libraries, auditoriums, band rooms, cafeterias, corridors, gyms. It creates quiet comfort that helps students and staff alike to work better!

Acousti-Celotex Tile is quickly installed at moderate cost in existing buildings, with no interruption of school routine. Standard perforated tile needs no special maintenance, can be painted repeatedly and washed without impairing sound absorbing capacity.

You can place full confidence in your local distributor of Acousti-Celotex products. He is a member of the world's most experienced Sound Conditioning organization. He has the broad training and "know-how" —the job-proved methods—the complete line of top quality acoustical products necessary to meet every specification, every requirement, every building code! Let him analyze your problems early in the planning stage. That's the way to be sure of the most effective, most attractive installation possible.

FOR A FREE ANALYSIS of your particular noise problem in new or old buildings, write now for the name of your local distributor of Acousti-Celotex products. On request, we will also send you a free copy of the informative booklet, "Sound Conditioning for Schools and Colleges." Address: The Celotex Corporation, Dept. T-91, 120 S. La Salle St., Chicago 3, Illinois. In Canada: Dominion Sound Equipments, Ltd., Montreal, Quebec.

TOPS IN WASHABILITY—Two coats of tough finish bonded under pressure of a hot knurling iron builds a surface of superior washability right into Celotex Cane Fibre Tile.



ACOUSTI-CELOTEX
Sound Conditioning Products

PRODUCTS FOR EVERY SOUND CONDITIONING PROBLEM

THE CELOTEX CORPORATION, 120 S. LA SALLE ST., CHICAGO 3, ILLINOIS

Medal of Honor



Sergeant Charles Turner, of Boston, Massachusetts—Medal of Honor, Korea. On September 1, 1950, near Yongsan, Korea. Sergeant Turner took over an exposed turret machine gun on a tank. Despite fifty direct hits on the tank, he stayed by his gun and destroyed seven enemy machine gun nests before he was killed.

You and your family are more secure today because of what Charles Turner did for you.

Sergeant Turner died to keep America free. Won't you see that America *stays* the land of peace and promise for which he gave his life? Defending the things he fought for is *your* job, too.

One important defense job you can do *right now* is to buy United States Defense® Bonds and buy them regularly. For it's your Defense Bonds that help keep America strong *within*. And out of America's inner strength can come power that guarantees security—for your country, for your family, for you.

Remember that when you're buying bonds for national defense, you're also building a personal reserve of cash savings. Remember, too, that if you don't save *regularly*, you generally don't save at all. Money you take

home usually is money spent. So sign up today in the Payroll Savings Plan where you work, or the Bond-A-Month Plan where you bank. For your country's security, and your own, buy U. S. Defense Bonds now!

****U.S. Savings Bonds are Defense Bonds - Buy them regularly!***



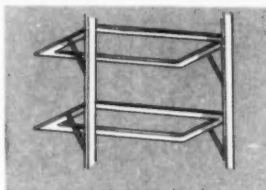
The U. S. Government does not pay for this advertisement. It is donated by this publication in cooperation with the Advertising Council and the Magazine Publishers of America as a public service.



Auto-Lok
the Perfect
WINDOW

for **SCHOOLS**

NO MORE PAPER-BLOWING DRAFTS



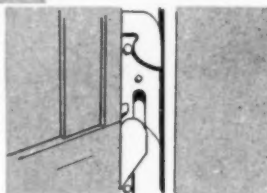
OPENS WIDEST

Auto-Lok vents open nearly straight out -- to give more fresh air for classrooms in any weather, anywhere.

You can positively control incoming air with Auto-Lok's draft-free design. Air is scooped in and directed upward...following natural air currents. Classrooms are more comfortable, pupils are not subject to drafts which breed respiratory infections.

Any degree of ventilation with just a twist of the wrist. When extreme weather demands, vents can be closed by a child...no need to call the janitor. Leave vents open even when it's raining to provide fresh ventilation and keep "sleepy heads" wide awake.

The Perfect Window for schools, Auto-Lok offers the utmost minimum of upkeep. Precision-balanced, adjustment-free operation, easy cleaning from the inside. Removable inside screens stay cleaner, last longer.



CLOSES TIGHTEST

Patented Auto-Lok hardware ingeniously pulls vents in against vinyl weatherstripping and anchor-locks vents at all four corners... assuring a degree of tight closure heretofore believed impossible.

EASIEST TO OPERATE

Precision-balanced hardware and hand-some unobtrusive operator permit effortless operation, fewer turns. It's as easy to open as it is to close.



ENGINEERING SERVICE

School architects and designers everywhere call upon Ludman's experienced engineering staff to help solve intricate window problems. Why don't you?

TIGHTEST CLOSING WINDOW EVER MADE

Before you build or remodel your school, ask us to send the booklet, **"WHAT IS IMPORTANT IN A WINDOW?"**
Address Dept. CU-9

Auto-Lok
aluminum or wood
WINDOWS
SEALING LIKE A REFRIGERATOR

LUDMAN
Corporation
BOX 4541
MIAMI, FLORIDA



Off and on the Campus — it's America's favorite!

Popular? Just ask your students for their number one choice in cereals. It's Kellogg's!

For back home, more undergraduates have eaten and enjoyed Kellogg's cereals than any other brand.

Take Rice Krispies, for example. Packed

with the famous Kellogg flavor, here's the cereal that's so crisp it goes *Snap! Crackle! Pop!* in milk. No wonder it outsells *all* other ready-to-eat rice cereals combined.

And remember. All Kellogg cereals either are made from whole grain or restored to whole-grain levels of thiamine, niacin and iron.

Order a complete assortment of Kellogg Individuals from your wholesaler salesman today! See what a welcome they get from *everyone!*

KELLOGG'S CORN FLAKES • RICE KRISPIES • PEP • KELLOGG'S 40% BRAN FLAKES • KRUMBLES
KELLOGG'S SHREDDED WHEAT • KELLOGG'S RAISIN BRAN FLAKES • CORN-SOYA • ALL-BRAN

MOST STUDENTS LIKE *Kellogg's* **MOST**

THE GREATEST NAME IN CEREALS

Battle Creek and Omaha

WHAT'S NEW

September 1951

Edited by Bessie Covert

TO HELP you get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 104. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. COLLEGE and UNIVERSITY BUSINESS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Toledo Peelers



The peel trap on the new Toledo Peelers has been redesigned and brought in flush with the cabinet. There is a self-cleaning action in the interior with peels going directly to the trap. The new models have a clean-line appearance and are finished in two tone gray.

Special attention has been given to easy adaptation of the machine to various installation requirements. Leg height can be changed in the field as can the direction of the discharge chute and motor control location. The new Toledo Sterling Peelers are available in 15, 30, 45 and 60 pounds per minute capacities and feature the standard Toledo "double action" peeling with Carborundum brand abrasive on both the cylinder wall and in the rotating disc. **Toledo Scale Co., Dept. CUB, 1023 Telegraph Rd., Toledo 12, Ohio. (Key No. 855)**

Dynamometer

A new Back and Leg Dynamometer is being introduced for accurately testing back and leg lifts. The instrument has a capacity up to 2500 pounds, the brass dial scale, with black etched numerals, graduated in 10 pound increments. The bright red indicator remains at high reading until manually reset. The heavily plated lifting handle is 20 inches long with full height adjustment chain.

Extra heavy construction is employed for the white oak base or bench. The top is segmented for extra strength, will not warp and is equipped with wide skidproof treads. **Fred Medart Products, Inc., Dept. CUB, 3535 DeKalb St., St. Louis 18, Mo. (Key No. 856)**

Comptometer Desk

Especially designed to accommodate a comptometer or adding machine in a recessed area is the new desk recently introduced. The recessed area is on the right, with working space at standard desk height on the left. A small shelf is provided below the recessed area. The desk is available in three finishes and several sizes. **Crown Institutional Equipment Co., Dept. CUB, 218 S. Wabash Ave., Chicago 4. (Key No. 857)**

Automatic Controls

The Lawler Water Pressure Equalizers are designed to maintain equal pressures in the hot and cold water lines to the fixtures, regardless of any variance in pressures in the supply lines. When there is a sudden demand for hot or cold water because of the use of a fixture on the same supply line, there will be a decided pressure drop on the



line in use. The Lawler Water Pressure Equalizer immediately counteracts this change, closing down on the higher pressure line and at the same time increasing the opening of the lower pressure line. It is especially practical where there are showers and other installations where pre-set water temperatures must be held stable. **Lawler Automatic Controls, Inc., Dept. CUB, 453 N. MacQuesten Pkwy., Mt. Vernon, N. Y. (Key No. 858)**

Acousti-Celotex Finish

A new washable finish is being incorporated into all Acousti-Celotex sound conditioning tile. The result of years of research and development by the company, the new finish is applied directly to the board under pressure, becoming an integral part of the tile. The new finish is a tough, flexible coating with a linen-like texture. It gives better light diffusion than a smooth surface with the same light reflection value. **The Celotex Corp., Dept. CUB, 120 S. La Salle St., Chicago 3. (Key No. 859)**

(Continued on page 84)

Liquid Sander

Paint, varnish or enamel can be removed quickly and effortlessly from wood or metal surfaces with Lquisan, a liquid which penetrates the paint or enamel, loosens it and is washed off with the coating, leaving a film-free surface. Lquisan is designed to reduce labor in maintenance of wood and metal surfaces to be repainted. It can be used on floors, furniture, desks, woodwork, and other wood surfaces and also on metal furniture and other metal equipment requiring refinishing. **J. F. Kerns Co., Dept. CUB, 350 W. Ontario St., Chicago 10. (Key No. 860)**

Honor Roll Plaque

A new solid walnut honor roll plaque in shield design is being offered with sculptured bas relief heading design, cast in special plastic material and finished in simulated bronze colors. The shield is 18 by 26 inches overall, ¾ inch thick, beveled, with hand rubbed finish. It has two hangers on the back with three star ornaments on the face.

The plaque will accommodate up to 60 name plates which are engraved on statuary brown Lamicoid plastic material with lettering filled in gold. More names can be accommodated if smaller plate size is used. The name plate at the bottom is designed to carry the name of the school or other institution displaying



the plaque. **International Bronze Tablet Co., Inc., Dept. CUB, 150 W. 22nd St., New York 11. (Key No. 861)**

*Save Labor-
Save Floors!*



SCRUBBING
POLISHING
STEEL WOOLING
DISC SANDING
BUFFING

One machine does ALL!

Today's efficient American Machines will materially reduce time, labor and costs in floor maintenance . . . and increase the life of floors! Ample power for scrubbing or polishing asphalt or rubber tile, terrazzo and all types of floors . . . removing gummy, sticky accumulations . . . sanding operations . . . steel wool operations, dry cleaning . . . and buffing or burnishing. All popular sizes. Also—you can reduce maintenance and cleaning costs on *any* floor with American Floor Finishes—cleaners, seals, finishes and waxes produced with nearly half-a-century's experience in floor problems. Your nearby American distributor will be glad to call and talk over your floor service problems, without obligation.

AMERICAN 48 Years of FLOOR MACHINES Leadership

SEND
TODAY!

The American Floor Surfacing Machine Co.
590 So. St. Clair St., Toledo 3, Ohio

Send latest catalog on the following, without obligation:

☐ Maintenance Machine ☐ Floor Finishes

☐ Please arrange a FREE demonstration of the American Deluxe Floor Maintenance Machine and American Floor Finishes. No obligation.

Name _____

Street _____

City _____

State _____

solid
saddle seat
GUI-57

Seat—
17" x 17"



solid
saddle seat
6340-S7-
H19

Hat Rack

Seat—

17" x 17"

Tablet—

12" x 23"



pod seat
6424-SU9

Seat—

17" x 16"

Also with

Saddle Seat



Thonet gives you these advantages

- **quality**—the finest in furniture since 1830
- **styling**—exclusive designs, lovely finishes
- **durability**—sturdily built for years of service
- **comfort**—engineered for maximum ease
- **planning service**—layouts and blueprints
- **price**—most reasonable because of our large volume production

Write for illustrated folder.



DEPT. H-9
ONE PARK AVENUE
NEW YORK 16, N. Y.

SHOW ROOMS:
NEW YORK • CHICAGO
STATESVILLE, N. C. • DALLAS

COLLEGE and UNIVERSITY BUSINESS



W. E. Berube, Audio-Visual Department Director, inspects film in new Filmosound projector. The department library now contains 200 movie films and 800 film strips.

Pawtucket Schools Score 10 Year Film Program Success

B&H Filmosounds play basic role. The Pawtucket (R.I.) Schools' film program has been a success right from the start ten years ago. Today the city's schools use twenty 16mm sound projectors for the three-thousand-odd classroom showings every year. And the program is continually expanding!

Here's what W. E. Berube, Director of the Audio-Visual

Department, has to say about his experience with Filmosound projectors:

"No small factor in the success of our film program is the dependability of Bell & Howell Filmosound projection. This equipment is ruggedly built, quiet and dependable in operation. Filmosounds have proved themselves in the varied and hard use we have put them to."



The modern equipment at the disposal of this efficient staff assures the continued success of Pawtucket's Audio-Visual program.

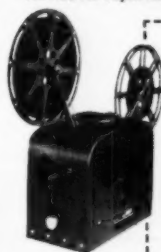
16mm Single-Case Filmosound. For classroom or auditorium, for sound or silent films. Will reverse or show still pictures. Completely contained in a single case. Built-in 6-inch speaker operates within the case or removed from it. Larger, separate speakers available for single or multiple use. Brilliant lifelike motion pictures, natural flutterless sound.

Guaranteed for life. During life of product, any defects in workmanship or material will be remedied free (except transportation).

*You buy for life
when you buy* **Bell & Howell**



Success of Pawtucket film program leads to central truck delivery service for rapid distribution of films and equipment to all schools.



FREE AIDS FOR SIGHT-SOUND EDUCATION PROGRAMS!

Bell & Howell
7192 McCormick Road, Chicago 45, Ill.
Please send me without cost or obligation
the two helpful booklets:
"Learning Unlimited" "Free Film Sources"

Name _____
Address _____
Organization _____
City _____ Zone _____ State _____

WHAT'S NEW...

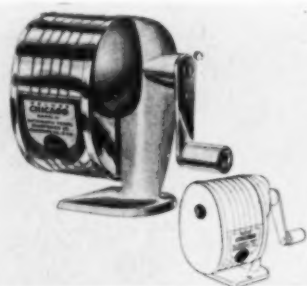
Square Root Calculator

A new feature that can be incorporated into the current Model STW-10 Friden Calculator is the Friden Fully Automatic Square Root Calculator. Developed by Mr. Grant Ellerbeck, the machine is entirely automatic and extracts square roots and points off the correct decimal in the root through entry of the number and touch of one key. The machine is designed to extract the square root of ten digit numbers in nine seconds without the use of tables. Friden Calculating Machine Co., Inc., Dept. CUB, San Leandro, Calif. (Key No. 862)

Redesigned Pencil Sharpeners

The new Model 51 series of Apsco Deluxe Pencil Sharpeners has been completely restyled in Neoteric design. The new Neoteric design is used on the Chicago Deluxe for standard pencils, the Giant Deluxe with centering turret for all sizes of wood case pencils and crayons, and the Premier Deluxe with automatic feed. The new design is attractive in appearance and the sharpeners feature the sturdy construction and durable hollow milled cutters developed by the company for their complete line. Bases are die cast of an alloy having exceptional tensile, impact and compression strength

and are reinforced at stress points. The shaving receptacles have transparent acetate windows, are designed for maximum capacity in minimum space and lock in any of three positions for vari-



ous mountings. Automatic Pencil Sharpener Co., Dept. CUB, 336 N. Foot-hill Rd., Beverly Hills, Calif. (Key No. 863)

Ice Cube Machine

Model A5A-4 is a new addition to the line of ice cube machines made by Ajax Corporation. The new unit has the same type of freezing mechanism as the Model A5A-2 but it has a larger storage bin which holds 150 pounds of ice. The stor-

age bin is so designed that the oldest ice can be used first. The unit also has a new type mechanical storage bin control which simplifies service and maintenance. The ice can be easily removed through a waist height counterbalanced door.

The Ajax Electric Iceman is powered with a Servel Supermetec compressor. The cabinet has blue-gray hammerloid finish which is tough and durable and blends with its surroundings. Ajax Corporation of America, Dept. CUB, 2509 Washington Ave., Evansville, Ind. (Key No. 864)

Floor Brush Tip

To help solve the floor brush thread stripping problem, the Flo-Pac cast aluminum tip is put on the end of regular hardwood handles under hydraulic pressure. Fins on the inside of the tip groove into the handle and keep it from turning. A wood screw through the end of the tip keeps it from pulling out. The aluminum tip is threaded for all standard floor brush threads.

The new tip is designed to eliminate stripping of the threads on both the handle and the brush. It gives the handle superior holding and threading qualities and long life. The Flour City Brush Co., Dept. CUB, 1501 Fourth Ave. So., Minneapolis 4, Minn. (Key No. 865)

(Continued on page 86)

BUDGET-MINDED BURSARS *OK*

CROTTY BROTHERS DINING HALL SERVICE

They like this business-like way of controlling their student feeding costs...the savings in valuable administrative time, trouble and expense that result in Crotty Brothers' efficient management of the school dining hall.

Tried and proven in some of our better

known prep schools and colleges, this service provides a complete Crotty-trained staff that functions smoothly as a school unit...assuring excellent food, economical operation and much needed continuity of responsible management.

DECIDE NOW

to modernize your dining hall operation. Write for this Crotty Plan today.

CROTTY
BROTHERS INC.

OPERATING IN 18 STATES AND 45 CITIES

137 NEWBURY STREET, BOSTON 16, MASS.
111 WEST WASHINGTON ST., CHICAGO 2, ILL.
303 SOUTHLAND ANNEX BLDG. DALLAS, TEX.

FOOD SERVICE MANAGEMENT SINCE 1930

AT THE HEAD OF THE CLASS...FOR

REPORT CARD



UTILITY	A+	A+
STRENGTH	A+	A+
ECONOMY	A+	A+

... Libbey Heat-Treated Tumblers

We ask you
to look at the record!



UTILITY.

All-matching design looks right anywhere... in the cafeteria... at the soda fountain. Handsome, practical shape offers a surer, safer grip, even when outsides of glasses are wet.



610
9 1/2 oz.

STRENGTH.

Libbey Heat-Treated tumblers are specially processed to stand up 3-5 times longer than ordinary tumblers under heavy "punishment" from students. Graceful convex-concave surface re-enforces sides.



ECONOMY.

Real long-run operating economy... through reduced breakage, smaller needed inventories, less storage space. And every glass has a chip-resistant rim, fully guaranteed: "A new glass if the rim of a Libbey 'Safedge' glass ever chips!"

TO ORDER:

Contact your near-by Libbey supply dealer. He has samples and prices of a whole line of Heat-Treated tumblers. Or write direct to Libbey Glass, Toledo 1, Ohio.



LIBBEY GLASS Bounce Tumblers

ESTABLISHED 1818



LIBBEY GLASS, Division of Owens-Illinois Glass Company, Toledo 1, Ohio

WHAT'S NEW ...

Work Tower

A mobile work tower has been introduced which is battery-powered and thus requires no electric connections. The tower telescopes to clear doors 7 feet high by 30 inches wide. Safety brakes on the casters keep it stationary when in use. The tower is controlled by a foot operated lever on the platform which quickly raises the tower to permit reaching equipment or ceilings 22 or 23 feet high.

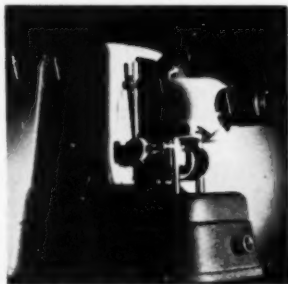
The all steel "Moto-Lift" is designed for one-man operation and is a self-contained unit. The work platform is elevated through extension of a hydraulic ram with a hydraulic pump operated by a battery-powered electric motor. A safety tube prevents the platform from dropping when the lever is pushed for lowering. The mechanism works quickly but smoothly at a speed which protects the worker. All operating parts are fully enclosed and protected from dirt and dust. **Safway Steel Products, Inc., Dept. CUB, 6234 W. State St., Milwaukee 13, Wis. (Key No. 866)**

Filmstrip Projector

A new filmstrip projector has been developed to show clear, sharp pictures on the screen in an undarkened class-

room. It uses a 500 watt lamp, blower-cooled, and produces 500 watt brilliance on the screen. Color pictures are clear and sharp without darkening the room. A built-in mechanical pointer permits the instructor to point out significant parts of the screen image.

The operator can change from filmstrip to 2 by 2 inch projection with a



simple pull-out, push-in operation which is quickly done. The push-in power cord receiver is built into a lift-off type carrying case and a filmstrip power rewind-cleaner and inspector is available as optional equipment. A picture leveler is in the carrying base. **Standard Projector and Equipment Co., Dept. CUB, 205 W. Wacker Drive, Chicago 6. (Key No. 867)**

Illumination Control

Model 1089 is a new weatherproof and simple illumination control of the plug-in type. It is designed for low operating and maintenance costs and provides completely automatic "on-off" control of artificial lighting at predetermined light levels. This eliminates arbitrary time schedules and human judgment and ensures better lighting control. It is ruggedly constructed for long trouble-free service and will function at unusually high and unusually low as well as at moderate temperatures. **Weston Electrical Instrument Corp., Dept. CUB, Newark 5, N. J. (Key No. 868)**

Dry Chemical Extinguisher

The Ansul 4-B is a new 4 pound dry chemical fire extinguisher with a rubber hose. It is designed for ease of operation, flexibility in fighting overhead and ground level fires and maximum extinguishing effectiveness for inexperienced operators. The new extinguisher has an operating range of 12 to 15 feet. Dry chemical is ejected through a self-closing nozzle which produces the fan-shaped stream pattern and makes the unit weather-tight. **Ansul Chemical Co., Dept. CUB, Marinette, Wis. (Key No. 869)**

(Continued on page 88)

The OFFICE VALET

—Combines the best features of both lockers and coat racks



Wraps are exposed to air and light. Students do not face the weather in damp wraps that have been crumpled in dark lockers—do not eat soggy lunches, soaked by wet hats or gloves. Each student has his own spaced coat hanger, ventilated hat shelf and 12" x 15" deep lock box for lunches, boxes, drawing instruments, etc.

Lockerettes save space too... the No. 6-12 (2 column) accommodates 12 people in 6 feet; the No. 9-18 (illustrated) accommodates 18 in 9 feet.

Write for Bulletin No. OL-16



VOGEL - PETERSON CO.
624 So. Michigan Ave., Chicago 5, Ill.



Don't Let **ATHLETE'S FOOT** Bench YOUR Players!
ALTA-CO BUILDS MORE EFFECTIVE TEAMS!

In baseball, track, swimming and any sports competition, **HEALTHY** teams are **WINNING** teams. **ONE** member with painful, distracting Athlete's foot can impair the efficiency of your entire team.

Here's the Sound Tested Program for **ATHLETE'S FOOT** Control:

1. ALTA-CO POWDER

... for the all-important foot tub in your shower rooms. One pound to a gallon of water kills common Athlete's Foot fungi in less than a minute! Non-irritating; harmless to towels. Easily tested for proper strength with Dolge Alta-Co Powder Tester.

2. ALTA-CO FOOT POWDER

... for dusting, gives additional protection against re-infection. Soothes while drying between toes in shoes and socks, this potent but gentle fungicide does its work where Athlete's Foot fungi flourish.

3. ALTA-CO 300 H.D. FUNGICIDE

... for your daily, systematic washing of shower room floors. In economical solution (1 to 300), its action is both fungicidal and bactericidal, giving your floors the same hygienic sanitation you demand be taken by each user of your facilities.

Write for 36-page illustrated booklet, "Athlete's Foot—A Public Health Problem."

Dependable
DOLGE
WESTPORT, CONNECTICUT



Comfortable Surroundings That Make *College Days* Hard to Forget!

Students appreciate never-to-be-forgotten surroundings of real charm and livableness . . . and with this in mind, SIKES designers have fashioned furniture unique in its richness of beauty, adaptability and comfortableness.

Modern, with simplicity and restraint of styling so as to never grow tiresome. Adaptable,—the mellow Ginger Cherry finish and liberal choice of fabrics promise harmony with most any interior scheme. Durable,—the SIKES mark means experienced craftsmanship with close attention to the hidden details that make furniture truly lasting. Economical,—the hand-rubbed finish of superior long-lasting quality on selected, carefully-seasoned Solid Cherry bodes well for low-cost maintenance and wear-resistance to the enthusiasm of college living.

Write for photographs and specifications, mentioning specific uses you have in mind.

SIKES furniture

THE SIKES COMPANY, INC.

• 32 CHURCHILL STREET

• BUFFALO 7, N. Y.

FOR DORMITORIES, DINING ROOMS, LIBRARIES,
CLASSROOMS, OFFICES, RECEPTION ROOMS, CLUBS



WHAT'S NEW . . .

Seal and Varnish Stripper

Multi-Clean Seal and Varnish Stripper is a non-inflammable product designed to remove all types of varnish, seals, shellac, enamels and paints thoroughly and safely. It works equally well on wood, concrete or terrazzo floors, lifting the old finish away from the surface in a dry and dustless form for easy pickup with a broom or vacuum cleaner. The product leaves no wax or objectionable residues, thereby eliminating the necessity for further washing of the floor before refinishing.

If the stripper is applied at night with an applicator or brush, the finish can be removed the next morning with a steel wool pad under a floor machine. If more speed is desired, it can be easily applied, left on 30 to 40 minutes, the finish lifting off readily with the aid of steel wool or scraper. **Multi-Clean Products, Inc., Dept. CUB, 2277 Ford Pkwy., St. Paul 1, Minn. (Key No. 870)**

Music Typewriter

The Keaton Music Typewriter consists of a typing unit mounted over a flat platen or board. Character keys are arranged on a keyboard which can be shifted up or down the scale over a four-octave range, placing the characters in-

stantly in precise printing position. The paper lies flat and is always visible. The typing unit moves across the paper when any one of the three space keys is pressed. Movement between staves is accomplished by shifting the paper up and down over the level platen.

A position pointer indicates the exact place where characters will strike on the paper. Ledger lines and bar line keys are in correct position in relation to the staff, being set on a keyboard independent of the other characters. Standard music paper with 1/12 inch between staff lines is used and the machine types



one-voice parts, any conceivable chord, double-staff piano parts or multiple-staff scores. It is compact, easily mastered and permits fast copying of music for one copy or for quantity reproduction. **Keaton Music Typewriter Co., Dept. CUB, 461 Market St., San Francisco 5, Calif. (Key No. 871)**

(Continued on page 90)

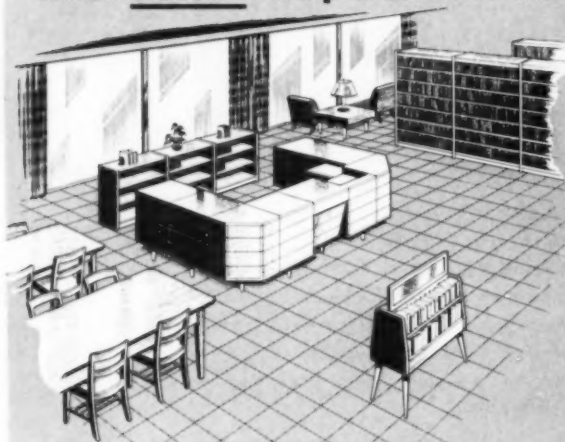
Sound System Console

A new dual-channel consolette has been introduced for use with medium-sized sound systems. It is suited for a variety of instructive and recreational uses as well as communication and administrative control services for schools, colleges and other institutions. The new consolette is designed to provide recorded programs, radio programs or locally originated sound programs or announcements to as many as 40 selected rooms or areas.

The two complete audio channels permit providing different programs to selected areas. The unit can also be used as a two-way communication system, without disturbing the two program channels, by the addition of an optional amplifier. A master emergency switch throws all areas into instant contact for emergency announcements. Provision is made for attaching a separate record player, transcription turntable or radio tuner.

The inclined front panel provides for one or two banks of 20 switches, each switch controlling one loudspeaker location. The unit is housed in a well-constructed metal cabinet finished in two-tone amber-gray. **RCA Victor Division, Radio Corporation of America, Dept. CUB, Camden, N.J. (Key No. 872)**

what doesn't the picture show?



JOHN E. SJÖSTRÖM COMPANY

1727 N. Tenth Street, Philadelphia 22, Pa.

The picture doesn't show the *sound reasoning* which provided the basis for the functional design of "New Life" Library Furniture.

It shows lots of other things—simplicity of line, charm, harmony of design—but it doesn't show *how* these came about.

From our Catalog L-50 you can find out why there is no "dead space" in a "New Life" charging desk assembly, how a card catalog file can be expanded, and what other advantages exist.

Our field representative can tell you how all units and assemblies are constructed to give long service, and in what other ways Sjöström design and construction benefit you.

If you're planning to purchase library furniture, these are *some* of the elements you will want to *investigate carefully*. There are other important elements, too. Request our Catalog L-50. Ask that we have our field representative call. Then you can *properly* analyze, compare, and evaluate, and determine precisely what you want in your library furniture.

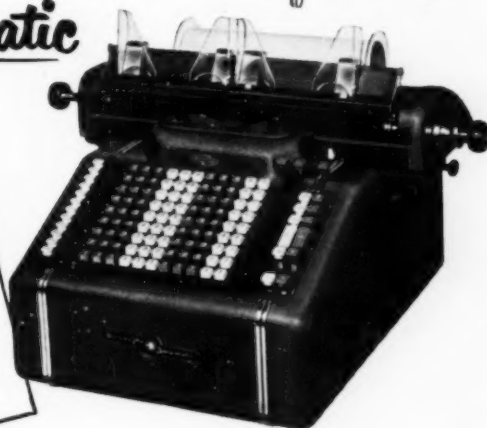
MANUFACTURERS OF *New Life* LIBRARY FURNITURE

SPEED and EFFICIENCY
you never thought possible
in accounting for schools



The Incomparable New
Burroughs Sensimatic
accounting machine

HANDLES ALL THESE JOBS—*and more*
Budgetary Accounting • Cost Records
Expenditure and Revenue Distribution
General Ledger • Student Accounts
Payrolls • Stores Records



There's a new standard of accounting efficiency in many educational institutions today. It's a standard made possible by a completely new idea in mechanized accounting—the revolutionary new Burroughs Sensimatic with the "mechanical brain" that directs it automatically through every accounting operation.

Here is a new accounting machine with amazing versatility, speed and ease of operation. The Burroughs Sensimatic does school accounting jobs with a saving of time, money and effort over former accounting methods—and just the turn of a knob moves it speedily from one posting job to the next.

Find out today how the Burroughs Sensimatic can save working hours, reduce your accounting costs, and increase efficiency. And all at a surprisingly moderate cost, too. Call your local Burroughs office or write for complete information today. Burroughs Adding Machine Company, Detroit 32, Michigan.

WHEREVER THERE'S BUSINESS THERE'S

Burroughs



WHAT'S NEW . . .

Disposable Toweling

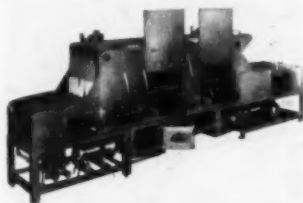
Medico Toweling is a soft, white disposable product which can be used either wet or dry. It is said to be lint-free and fully absorbent and not to fall apart when wet. It can be used as disposable wash cloths, for drying the face and hands, to wash and clean practically any surface, for slings, foot mats and many other purposes. It is packed in rolls of 100 feet in portable dispenser boxes, each equipped with metal cutting edge for ease in using any desired length. A complete unit of 12 dispenser boxes is packed in a patented wood-grained finish receptacle, providing a self-contained service for dispensing the towels and a receptacle for the used towels. Developed in Canada, Medico Toweling is released in the United States by Woodlets Inc., Dept. CUB, Portland, Pa. (Key No. 873)

Dishwashing Machine

A new pump type dishwashing machine is being introduced which features a rackless all nylon molded conveyor. No metal is exposed which could chip or mar dishes. Cups and glasses are placed on the conveyor without the use of dish racks and plates are placed upright between the nylon pegs. Nylon rollers afford smooth, quiet rolling of

the conveyor over extruded brass rails.

All parts and scrap trays of the machine are easily accessible through large clean-out doors on the front of the machine. The scrap trays completely cover each wash and rinse tank and fine perforations are used for maximum filtration of food particles. The new series, 85PT, is available in three standard models: a two tank machine; a two tank machine with pre-wash from available



water supply, and a three tank machine. G. S. Blakeslee & Co., Dept. CUB, 1844 S. Laramie Ave., Chicago 50. (Key No. 874)

Joanna Wall Covering

A new vinylized fabric wall covering is being introduced for use where durability, washability, fire-resistance and attractive appearance are important. Joanna

Wall Coating employs a newly perfected vinyl plastic coating applied to a supporting cotton fabric. The resulting material is resistant to scuffing and abrasion, is stainproof and is easily hung. It may be washed with any kind of soap and water or with detergents. The covering is fire resistant as it contains no oils or other inflammable ingredients and when subjected to a blow torch after it was hung, the flame died immediately the torch was removed. The new wall fabrics are now available in 28 attractive colors with texture embossing or overprints, and special colors to suit any need are custom coated in lots of 250 yards or more. Joanna Western Mills Co., Dept. CUB, 22nd and Jefferson, Chicago 16. (Key No. 875)

Direct Reading Meter

Water purity on the Barnstead Bantam Demineralizer is now indicated on a direct reading meter. This new device permits a constant purity check on the flow of demineralized water. The instrument is calibrated in parts per million and also in ohms electrical resistance. The Bantam Demineralizer is complete with a needle type regulating valve for easy flow adjustment, a drain valve and a sturdy base for bench mounting. Barnstead Still & Sterilizer Co., Dept. CUB, Boston 31, Mass. (Key No. 876)

(Continued on page 92)

You get double duty SERVICE

...from a Wayne Type "H"

There's good reason to specify Wayne's Type "H" Steel Portable Grandstand . . .

For you can use it either in or out-of-doors!

Weighing only 696 lbs., a standard 4-row unit can be carried intact through the usual gym doorway. And larger units, which are made in portable sections, can be easily moved to the locale desired. The move can be made quickly, with no mechanical experience necessary.

Also with a Wayne Type "H" —

You can start today with a small unit and add to it later, in either length or number of rows, as your space and budget permit.

Why not check all the details? Write for Catalog 1-H.



**WAYNE
IRON
WORKS**

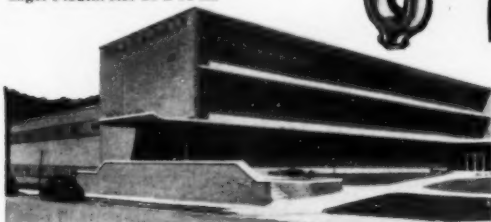
REPRESENTATIVES IN 42 CITIES

146 N. PEMBERKE AVENUE
WAYNE, PENNSYLVANIA

THE PREFERRED SCHOOL PLUMBING

AT HIGHTOWER TEXTILE BLDG.
GEORGIA INSTITUTE OF TECHNOLOGY
 ATLANTA, GA.

CRANE RHODIE lavatory, preferred by many schools for its simple, modern design. Cast iron construction with porcelain enameled finish. Spacious rectangular basin and 6-in. high back. *Dial-ese* controls that operate at a finger's touch. Size 20 x 18 in.



BUSH-BROWN, GAILEY & HEFFERMAN, Atlanta
 ARCHITECT

RAY M. LEE CO., Atlanta
 GENERAL CONTRACTOR

TILMON FRANCIS & SONS, Atlanta
 PLUMBING CONTRACTOR

For everything in school plumbing, see your Crane Branch, Crane Wholesaler, or Local Plumbing Contractor

CRANE CO.

GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO 5
 VALVES • FITTINGS • PIPE
 PLUMBING AND HEATING

WHAT'S NEW ...

Porter-Cable Sander

The new Model 105 Finishing Sander is a powerful motor-driven machine with two counter-balanced transmissions. The abrasive pad revolves in a 3/16 inch diameter orbit at 5000 r.p.m., producing a uniform, smoothing action on wood, metal, plastic and composition. The Guild orbital motion sander can be used for all types of maintenance work requiring a sander as well as in finishing on new construction, and in woodworking. It is 9 inches long, 3 inches wide and 3 1/4 inches high. It can be easily maneuvered in corners and close to trim or molding. It is light in weight and has a smoothly operating motor. **The Porter-Cable Machinery Co., Dept. CUB, Syracuse 8, N.Y. (Key No. 877)**

Sound Lectern

A complete unit for voice amplification is provided in the Langevin Sound Lectern. Microphones, amplifier and loud speaker are all built into an attractive walnut cabinet which is readily mobile. The cabinet serves as a lectern with spacious reading desk and an 18 inch fluorescent light. The unit is ready for use by simply plugging the cord into a power outlet.

The unit is especially designed for use in conferences, lectures, classes and

similar meetings where voice amplification is desirable. For larger areas or overflow audiences there is sufficient power to add external loud speakers. A phonograph or recorder may be attached to the unit if desired. The cabinet is fitted with large ball bearing, rubber tired casters for easy mobility. A regular mi-



crophone is permanently installed on the reading desk and a lapel microphone is supplied to give the lecturer complete freedom of movement while still amplifying his voice. **Carl Langevin Incorporated, Dept. CUB, 120 E. 13th St., New York 3. (Key No. 878)**

(Continued on page 94)

Heavy-Duty Steam Gun

Where heavy-duty steam cleaning operations are required the new Model 502 Oakite Solution-Lifting Steam Gun will be of interest. It is designed for use where range of operation pressure is 50 to 100 p.s.i., with minimum boiler rating of 25 or more h.p. recommended. With the gun, steam-detergent spray is automatically lifted 12 feet above the working level to provide thorough cleaning of large equipment and other surfaces. **Oakite Products, Inc., Dept. CUB, 118A Thames, New York 6. (Key No. 879)**

Ink Remover

"Touch and Go" is the trade name of a newly perfected ink and stain remover which is colorless and odorless. It is offered in a specially designed applicator-container for easy use. The new applicator simplifies use since a small perforation permits just enough fluid to flow as needed. The cleaning solution removes all types of ink, fruit, vegetable and nicotine stains from the hands and has proved successful in removing stains from clothing. It can also be used to remove stains from furniture without damage to the finish. **Gregory Fount-O-Ink Co., Dept. CUB, 3501 Eagle Rock Blvd., Los Angeles 65, Calif. (Key No. 880)**

REALOCK

FENCE

gives **locked-in** protection

All fittings on Realock Fence have bolts so placed that nuts cannot be removed from the outside. This means that Realock Fence provides **added protection** for your grounds and property . . . effectively discourages tampering by would-be trespassers.

Strongly constructed, Realock Fence has high resistance to the elements because of a special galvanizing process . . . gives permanent protection and trouble-free service year after year. For additional information write our nearest sales office or consult your classified telephone directory.

THE COLORADO FUEL & IRON CORPORATION—Denver, Colorado
THE CALIFORNIA WIRE CLOTH CORPORATION—Oakland, California
WICKWIRE SPENCER STEEL DIVISION—Buffalo, New York

REALOCK FENCE

THE COLORADO FUEL & IRON CORPORATION

BRANCHES IN ALL KEY CITIES



PEABODY

TABLET-ARM CHAIRS

In the New "SUN-TAN" Color

Here's just what students want in a recitation or lecture room chair—real comfort—a rigid tablet arm—and a bright, cheery Sun-Tan color.

Behind all this are sound construction and quality materials to insure long service under most demanding conditions.

Write today for complete details on sizes—construction—prices—shipping—etc., to

See our Catalog in Sweet's

Chair No. 315 University

THE PEABODY SEATING COMPANY, INC.
BOX 23, NORTH MANCHESTER, INDIANA

HERRICK

STAINLESS STEEL REFRIGERATORS

Performance-Proved



in the
prize-winning
kitchen of
**St.
Vincent's
Hospital**
Toledo, Ohio



Top picture above shows an exterior view of the recently-completed \$5,000,000 addition to St. Vincent's Hospital. Directly above are two 6-Door Stainless Steel HERRICK Pass-Through Refrigerators in the St. Vincent kitchen.

HERRICK-Equipped Hospital Kitchen Wins Grand Award in Fifth Annual Food Service Contest

In this year's nation-wide Food Service Contest sponsored by INSTITUTIONS Magazine, St. Vincent's Hospital in Toledo, Ohio, received a Grand Award for its excellent kitchen. This up-to-the-minute kitchen is typical of the hospital itself, whose eight floors house the very latest in modern medical equipment. • The Grand Award is also a worthy tribute to ten HERRICK Stainless Steel Refrigerators serving St. Vincent's new kitchen. By keeping foods fresh and wholesome, these HERRICKS play an important part in filling the dietary needs of St. Vincent's patients. You, too, will find HERRICK Refrigerators unmatched for complete food conditioning. Write today for the name of your nearest HERRICK supplier.

HERRICK REFRIGERATOR CO., WATERLOO, IOWA
DEPT. C. COMMERCIAL REFRIGERATOR DIVISION



Combination desks
from PICK are quality made
for years of service...

Priced right, too!



You're assured of long service and lasting good looks with these outstanding new combination desks. Wooden parts are Northern Hard Rock Maple in a handsome natural finish. Seat and desk base are made in one piece of drawn sheet steel. Adjustable from A to C sizes. Prompt shipment. Since 1857 Pick has served the hotel, restaurant and institutional fields. Now let this experience serve you by selecting school furniture, equipment and supplies from Pick. Write for our School, College and University Catalog.

ALBERT PICK CO., INC.
2159 PERSHING ROAD, CHICAGO 4

WHAT'S NEW . . .

Antiseptic Huntolene

A new type germicidal product is being introduced for use in dust mops to reduce bacteria during daily maintenance. Known as Antiseptic Huntolene, the product is designed to control all types of communicable disease bacteria and prevent their growth. The mop head is sprayed with Antiseptic Huntolene and allowed to stand for 24 hours before using. It is basically a refined dust-laying distillate used for wood maintenance. In addition it sanitizes floors and mops, thus helping to prevent the multiplication of germs and the spread of disease. It rinses out of mops and cloths in soap and water, leaving them clean and sanitary for reuse. **Huntington Laboratories, Inc., Dept. CUB, Huntington, Ind. (Key No. 881)**

Film Inspecting Machine

An automatic machine has been developed which inspects 16 mm. projection prints. Known as Inspect-O-Film, the machine saves time and labor and does a dependable job of film inspection. So long as the film is satisfactory the machine requires no attention while inspecting the film. When a defect is located, the machine stops and the operator checks and if necessary repairs the film.

Thus the operator can run several machines or do other work while the machine is inspecting a film.

The machine checks for torn, broken or enlarged sprocket holes, run-offs or sprocket punches, breaks in the film and pin or Scotch tape splices. When a defect is located the machine stops, turns on



a signal to indicate the type of defect, and remains stopped until the damage is checked and repaired. If no damage is located in the print, the machine automatically counts the footage and the number of splices and shuts itself off at the end of the run. The machine is

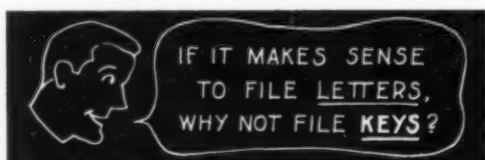
designed for use in both large and small film libraries and 400 feet of film is inspected in less than two minutes. It is designed in standard relay panel construction for easy access to the mechanism. **The Harward Co., Dept. CUB, Evanston, Ill. (Key No. 882)**

Shower Room Sanitation

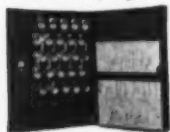
A new type of product for shower room sanitation and foot bath use, formulated to prevent the transmission of Athlete's Foot, is being introduced as Showersan. It contains Dynepal and a surface acting agent known as Antara Surfactant. The basic active constituent in the product is iodine which is rendered stable, non-irritating and non-staining when solubilized to form the synthetic detergent known as Dynepal.

Laboratory tests have shown that the Dynepal Showersan kills the resistant spores of the group that causes Athlete's Foot in less than 15 seconds in the dilutions recommended. The product is marketed as a preventive against the spread of Athlete's Foot and not as a cure for the disease. Showersan is also described as an excellent cleaner that may be used on all surfaces. **West Disinfecting Co., Dept. CUB, 42-16 West St., Long Island City 1, N.Y. (Key No. 883)**

(Continued on page 96)



KEY CONTROL is as necessary to a modern business as filing cabinets. It saves times and money, year in and year out, by eliminating expensive repairs and replacement of locks and keys. What's more, it guarantees security, convenience and privacy. No wonder Moore Key Control® is used throughout schools, institutions, hospitals, industry, government, transportation, communications, housing...wherever keys are used. Send for details today!



COMPLETE SYSTEMS FOR EVERY NEED

Wall Cabinets and Drawer Insert Trays from \$25.00 up.



Section of a typical control panel



Drawer file cabinets

TELKEE
TRADE MARK

Mail Coupon today for Free Booklet

P. O. MOORE, INC., Dept. C-4
300 Fourth Ave., New York 10, N. Y.
Please send booklet, "The Missing Link," describing MOORE KEY CONTROL.
Name _____
Address _____
City, State _____

Monroe FOLDING TABLES

And Folding Chairs

Ask for Catalog

The Original
"No Knee Interference"
Folding Banquet Table

DIRECT PRICES TO COLLEGES & SCHOOLS, CHURCHES, SOCIETIES, CLUBS, LODGES, etc.

Monroe Tables Designed and Manufactured Exclusively By

THE Monroe COMPANY
77 CHURCH STREET COLFAX, IOWA

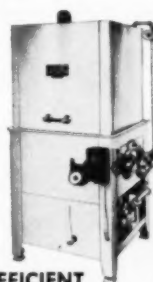
Cut Your Kitchen Costs

with up-to-date TOLEDO machines



NEW SLICER WITH ESTIMATOR

The Toledo Quick-Weigh Estimator—saves time, saves steps. Portions can be estimated right on the slicer. Illuminated platter... greatest ease of operation and cleaning... full choice of slice thicknesses up to $\frac{3}{4}$ ".



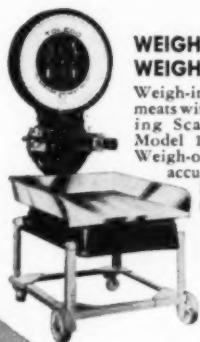
FAST, EFFICIENT DISHWASHING

Toledo Door-Type Dishwashers, with 3-Way Door, opens front and both sides... Zip-Lok makes it easy to remove spray tubes for cleaning, without tools. Conveyor-Type in full range of sizes and capacities.



WEIGH IT IN WEIGH IT OUT

Weigh-in all produce and meats with Toledo Receiving Scales... Portable Model 1800 shown here. Weigh-out portions quickly, accurately with Toledo Speedweigh over-and-under scales.



**TODAY IT'S
TOLEDO
ALL THE WAY!**

AND THESE TOLEDOS, TOO!



Choppers



Steak Machines



Saws



Peelers

SEND FOR BULLETINS

Check your needs... send for latest bulletins on these modern Toledo Kitchen Machines for your requirements today—

- | | | |
|--|--|--|
| <input type="checkbox"/> Peelers for potatoes and vegetables | <input type="checkbox"/> Slicer with Quick-Weigh Estimator | <input type="checkbox"/> Steak Machines |
| <input type="checkbox"/> Door-Type Dishwashing Machines | <input type="checkbox"/> "Gravity-Feed" Choppers | <input type="checkbox"/> Speedweigh Portion Scales |
| <input type="checkbox"/> Conveyor Dishwashing Machines | <input type="checkbox"/> Power Meat Saws | <input type="checkbox"/> Receiving Scales |
| | | <input type="checkbox"/> Ingredient Scales |

Write to... Toledo Scale Company, Toledo 1, Ohio

WHAT'S NEW . . .

Floor Treatment Materials

A new combination treatment featuring a wax polish and an improved cleaner are being introduced for floor maintenance. Diversey Plyowax is a non-slip, water-emulsion wax which is easy to apply and machine buffing gives it a long-lasting, glossy, wear-resistant surface. Plyokem is a mild, neutral liquid cleaner which completely cleans a Plyowax surface without impairing the finish. It can be used for hand or machine scrubbing and is harmless to personnel.

Known as the Plyo-Twins, the products can be used on all types of floors including rubber, asphalt and other composition tiles, linoleum, sealed wood, terrazzo and painted concrete. **The Diversey Corp., Dept. CUB, 1820 Roscoe St., Chicago 13. (Key No. 884)**

Tubular Folding Chair

Seam-Welded tubular steel is used for the frame of the new Norcor 320 Tubular Folding Chair. The entire framework, including the stretchers, radially welded to the legs, are of tubular steel for strength and rigidity. The frame is designed to hold its shape even under unusual strains.

The large, roomy seat is made of molded plywood and the chair design

is simple and comfortable. The chair folds easily but it is so designed that exceptional pressure on either the front or back of the seat will not collapse the chair. It is self-leveling with all four feet resting firmly on the floor even when the floor level is uneven. The chairs nest into one another for stacking when



folded. **Norcor Mfg. Co., Dept. CUB, Green Bay, Wis. (Key No. 885)**

Room Air Conditioners

Three improved models of window sill room air conditioners are being introduced by Carrier Corporation. Featuring simplified installation and easy removal for inspection, the units are contained

in new copper beige cabinets with a new hinged cradle-type mounting which reduces installation procedure. The entire air conditioning unit slides easily in or out of the mounting for inspection and servicing. The cradle itself can be easily removed or it can be swung inward so that the window can be lowered for washing.

Increased dehumidifying capacity is available with the new units, if desired, through the Carrier Humitrol. Complete thermostatic control is also available as an optional feature on the new models. The units provide cooling, dehumidification, air filtering, circulation and ventilation and are designed for year-round use. All units have hermetic-type compressors, adjustable outlet louvers, replaceable extra size filters and sound-proofed cabinets for quiet operation. **Carrier Corporation, Dept. CUB, Syracuse 1, N.Y. (Key No. 886)**

Adhesive "Tacks"

A small disc, adhesive on both sides, is offered to take the place of tacks and tape. Known as Stik-tacks, they adhere to any surface, including glass, metal and tile, and can be reused indefinitely. **Thompson-Winchester Co., Inc., Dept. CUB, 201 State St., Boston 9, Mass. (Key No. 887)**

(Continued on page 98)



Commemorating our 60th Anniversary

THE POWERS REGULATOR COMPANY

New Factory and General Office Building: 3400 Oakton Street, Skokie, Ill.

World's Most Modern Factory Producing Automatic Temperature and Humidity Control

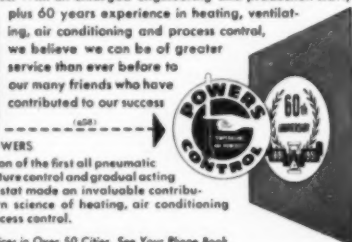
. . . to meet the greatly increased demand for Powers products and to give you better controls, better deliveries and better values . . . these advantages are possible with our large new plant and modern production facilities. With an enlarged engineering and production staff,



WILLIAM PENN POWERS

. . . with his invention of the first all pneumatic system of temperature control and gradual acting vapor disc thermostat made an invaluable contribution to the modern science of heating, air conditioning and industrial process control.

Offices in Over 50 Cities. See Your Phone Book.



PETERSON . . .
OUTSTANDING IN THE
FIELD OF
SCHOOL FURNITURE

LABORATORY
LIBRARY
VOCATIONAL
AND
HOME
MAKING



From coast to coast, leading schools recognize Peterson's reputation for quality furniture for laboratory, home making and library departments. What ever your requirements may be, call on Peterson's experts for an economical solution to your problems . . . No obligation is incurred.

Distributors located throughout the United States



LEONARD PETERSON & CO., INC.

1228 FULLERTON AVENUE CHICAGO 14, ILLINOIS

The ALLMARK of Leadership in Movable Interiors



*Hauserman Movable Steel Partitions in the
Newton Technical High School, Newton, Mass.*

...THE LEADER in National Factory Service

Hauserman was the first Movable Steel Interior manufacturer to establish a nation wide sales and service organization. This Hauserman national field force now has nearly 40 years of uninterrupted service experience in original installations, re-arrangements, and service work. You get life-time service from Hauserman, no matter how large or small the job, or where the installation may be. More Hauserman partitions are in use today than all other makes combined. And



this leadership grows greater every year. Send coupon for Hauserman full-color descriptive booklet, and ask a Hauserman representative to call.

Organized for Service Nationally since 1913

The Class Will Come to Order

*quicker, more efficiently, every semester
with Hauserman Movable Interiors*

Static, unmovable walls have no place in institutions of learning, where each semester sees a change in classroom requirements and numbers of students.

Hauserman Movable Steel Partitions permit quick adjustment of classrooms to the ebb and flow of student enrollment. The size and shape of each room can be built exactly to requirements, often in a matter of a few hours.

And when it comes to economy of maintenance, no walls can equal Hauserman for long-term freedom from painting, patching or washing. Their handsome appearance is a constant credit to the buildings which house them.

Send the coupon below for *The Inside Story of Building Economy*. For a prompt personal call from your nearby Hauserman office or representative, consult your classified Telephone Directory. See "Partitions."



PARTITIONS • WAINSCOT • RAILINGS • COMPLETE ACCESSORIES

The E. F. Hauserman Co., 7603 Grant Ave., Cleveland 5, Ohio

- ☐ Please send free copy of *The Inside Story of Building Economy*.
☐ Please have Hauserman representative call.

Name _____

Title _____

School _____

Street _____

City _____

State _____

WHAT'S NEW . . .

"Platform" Furniture

The solid panel supporting the seat cushions in the new line of metal furniture gives it the name "platform" furniture. It is designed to give long life and attractive appearance in rooms which are heavily used. Square steel tubing forms the basic frame of the new furniture which is smartly styled and has reversible seat cushions for longer life. A wide range of finishes is available, all in baked enamel. Pastel shades are featured on the metal parts and the upholstery is available in genuine leather, leatherette or a new royal frieze fabric designed to harmonize with a variety of other furnishings. **Royal Metal Mfg. Co., Dept. CUB, 175 N. Michigan Ave., Chicago 1. (Key No. 888)**

Quilted Plastic

Bolta-Quilt is a new electronically quilted plastic designed to withstand years of active wear. It can be used for wall covering, for paneling and wainscoting and for seating. Bolta-Quilt is fire-resistant, giving it added value in institutional use.

Made up of three layers of material sealed together by an electronic process, Bolta-Quilt consists of a top layer of special grade Boltatex all-plastic ma-

terial, a middle layer of fire-resistant cotton and a bottom layer of thin film. A special formulation of Boltatex is used which is designed to retain its luster and pliability through long, hard wear. Bolta-Quilt is the result of many months of research and has been thoroughly tested to meet rigid standards of quality. The material is washable, resists stains, fading, scuffing and cracking, does not chip or peel and is tough and durable. It is available in a wide range of colors and in the Boltatex Pearlized and Silhouette finishes as well as in solid and leather-like finishes. **The Bolta Co., Dept. CUB, Lawrence, Mass. (Key No. 889)**

Water Cooling System

A completely packaged circulating system for supplying clear, chlorine-free water in buildings to as many as 300 drinking stations has recently been announced. The compact new unit can supply multi-story buildings as well as large-area buildings with up to 400 gallons per hour of 50 degree water. It also generates up to 150 gallons reserve chilled water to meet extra heavy demands at special periods.

Smaller models of this compact unit, which is designed to reduce installation time and cost, are available suitable for from three outlets up, having the same

ratio of storage to capacity and affording the advantages of economy of installation and operation. A Filter-Rectifier assembly guards against varying conditions, eliminating tastes and odors and removing microscopic particles of rust, algae and sediment of all kinds to ensure clear, palatable water. The Packaged, Central Circulating System is designed for fast hook-up to power, water and return connections. **Filtrine Mfg. Co., Dept. CUB, 53 Lexington Ave., Brooklyn 5, N.Y. (Key No. 890)**

Glo-Ray Night Light

Designed to provide dim lighting in corridors, lobbies, stairways and other areas where some light is needed at night, the new "Glo-Ray" unit uses one 15 or 25 watt frosted incandescent lamp. The lamp housing is finished in black enamel, is 4 by 6 inches and requires only 3 inches recessing depth. The cover is zinc plated and left unpainted to be finished in the same color as the wall. Feed wires can be inserted at top, bottom or either side of the box and four knockouts are provided for the purpose. A shutter arrangement inside the cover controls the amount of light passing through the cover glass. **Curtis Lighting, Inc., Dept. CUB, 6135 W. 65th St., Chicago 38. (Key No. 891)**

(Continued on page 100)

WASH WALLS



AND
CEILINGS
← THIS
Modern
HIGHSPEED
LOW COST
WAY

SAVE costly REPAINTING by using

R & S Wall Washing Machines

• Approved by leading Universities and Colleges •

One man using the precision built R & S Chemical Wall Washing Machine can clean perfectly from 4000 to 5000 sq. ft. of your soiled wall and ceiling surfaces in an 8-hour day . . . at a cost of less than 10 cents for the chemical solution. The machine employs NO ACTIVE POWER. Operates silently. Absolutely no dripping or splashing of dirty water. No covering up of furnishings or equipment. Lowest-rate labor does a streakless, spotless job.

WRITE
for facts
NOW

The complete story will amaze you. Send for literature and list of university, college, school, hospital and other users. Demonstration by factory representative without obligation ON YOUR WALLS.

ROSS & STORY PRODUCTS CORP., Dept. C
Lincoln Bank Bldg., Syracuse 2, N. Y.

DAV-SON

The Standard of
Bulletin Board
Quality

Dav-Son Cork Back Bulletin Boards
For Pinning Up Announcements,
Photographs, Letters, etc.

- Indoor and Outdoor Styles
- Hardwood or Metal Frames
- With or Without Locking Glass Doors
- Many Sizes in Stock



Dav-Son Changeable Letter
Directories For Lobby, Office
or Outdoor Use.

- Wide Variety of Styles and Sizes
- Glass Enclosed Front
- Hardwood or Metal Frames
- Highest Quality Felt Background in
Choice of Several Colors
- Many Letter Styles and Sizes

INFORMATION

Dav-Son Name Plates For
Desk, Door or Wall Mounting
• Choice of Matching Wood Bases
• Names May Be Changed at Low Cost

WRITE TODAY FOR FULL
PARTICULARS AND PRICES

A.C. DAVENPORT & SON, INC.

ESTABLISHED 1922
311 N. DESPLAINES ST., CHICAGO 6, ILL.

MANUFACTURERS OF BULLETIN BOARDS FOR EVERY NEED



Cast Construction

**PROTECTS
YOUR
INVESTMENT**

Pairing molten bronze into
mold at The Chicago Hard-
ware Foundry Company.



Amber Forever Gen-
uine Cast Solid Bronze
Stool. Note base and
column are cast in
one piece!

WHEN YOU BUY...



STOOLS and TABLE BASES

Compare the quality of "CHF" stools and table bases with ordinary equipment and you will quickly discover why cast solid bronze, cast aluminum and cast iron finished in chrome or porcelain enamel are the finest stools and table bases made. Base and column are cast in one piece providing a smoother, neater appearance with no joint to work loose. Finishes are lustrous, smooth and as long lasting as the metal itself. You protect your investment when you get these extra built in quality features of "CHF" cast construction!



Installation of "CHF" table bases in Student Union Building, Michigan State College. Columns are satin chrome with durable porcelain enamel bases in green . . . the school color.

Write for Free Catalog!

Distributors in Principal Cities
THE CHICAGO HARDWARE FOUNDRY CO.
"Dependable Since 1897"
3191 COMMONWEALTH AVE. NORTH CHICAGO, ILL.

Sure!

Maintenance Men

are

HARD TO

GET...



*That's why
I depend on*

HILLYARD

MAINTAINER SERVICE

Why "buck" the problem when you can relax with easy-going Hillyard Floor Care. Simplified Hillyard Care substitutes "know-how" for brawn . . . easier methods save man hours of work . . . specialized chemical products perform with "behind-the-ears" thoroughness. . . . when I need help—Hillyard sends along a trained floor expert to lend a hand on the job . . . his straight-from-the-shoulder advice doesn't cost me a cent.

YOU CAN'T BEAT SERVICE LIKE THAT
any day in the week—particularly NOW when good maintenance men are so hard to find.

- ★ Talk over your maintenance program with a Hillyard Maintainer today. Get the benefit of his years of specialized experience. Learn the Hillyard way to maximum maintenance with a minimum crew . . . and reduce those costs as much as 50%. Write for Free Hillyard Help. Dept. D-9.

*"on your staff
not your payroll!"*



**St. Joseph,
Missouri**
Branches in
Principal Cities

WHAT'S NEW . . .

Product Literature

• A 34 page and cover, 8½ by 11 inch, spirally bound book has been published by The F. W. Wakefield Brass Co., Vermilion, Ohio, to tell the story of the **Wakefield Luminous Acoustical Ceiling**. Subjects covered in the book are the conception, principles, development in cooperation with M.I.T. authorities, applications to new and old construction, construction methods, colors to use in room decoration, and data on illumination, acoustics and air conditioning. The book includes a brightness study by Russell C. Putnam, consulting illuminating engineer, Cleveland, and complete diagrams of structural and electrical systems. Installation instructions on the Wakefield Ceiling, which has optional acoustic controls and becomes integral with the room functionally and esthetically, include diagrams and photographs. (Key No. 892)

• The new, faster drying **Sani-Dry hand and face dryer** manufactured by the Chicago Hardware Foundry Co., North Chicago, Ill., is discussed in a brochure recently published. Features of the new dryer—such as ease of mounting, faster drying, new circuit-breaker, instant starting, automatic timing and other advantages—are discussed and complete specifications on the dryer are included. (Key No. 893)

• Complete information on Kardex utility cabinets; Speedac and Security equipment for providing low cost visible records securely housed is given in a folder, "**Remington Rand Kardex Utility Cabinets**," issued by Remington Rand Inc., 315 Fourth Ave., New York 10. (Key No. 894)

• The story of "**Boston Pencil Sharpeners**" is told in a folder recently released by C. Howard Hunt Pen Co., Camden 1, N.J. A chart showing a performance test on pencil sharpeners and the results is included in the folder. (Key No. 895)

• The story of Kaylo calcium silicate products is told in a new 24 page booklet, "**The Story of Kaylo**," released by the Kaylo Division, Owens-Illinois Glass Co., Toledo 1, Ohio. The first half of the booklet is devoted to research and development history and is followed by the various uses to which this interesting product can be put. The booklet is fully illustrated with photographs, diagrams and drawings. (Key No. 896)

• A new folder has been issued by General Lamps Mfg. Corp., Elwood, Ind., "**Introducing Contempo General's New Lamps with the Safety Tip Feature**." In addition to full catalog information on the products, all floor and table lamps in the line are illustrated. (Key No. 897)

Methods Manuals

"**Facts About Floor Safety**" is the title of a new booklet designed to help make floors as safe as possible. Published by S. C. Johnson & Son, Inc., Racine, Wis., the 20 page booklet describes the recommended finishing techniques and routine maintenance methods for asphalt and rubber tile, linoleum, wood, concrete and terrazzo flooring and gives practical floor care hints on cleaning, polishing, touching up and refinishing. The booklet was compiled after exhaustive tests in the Johnson Research Laboratories and was developed in cooperation with major casualty insurance companies interested in the elimination of unsafe floor maintenance practices. (Key No. 898)

A 32 page manual giving helpful information required in the selection and application of radiation heating equipment for steam or hot water systems has been prepared by C. A. Dunham Co., 400 W. Madison St., Chicago 6. Entitled **Application Manual No. 1295**, the booklet is a guide for specifying and installing Convectors, Baseboard and Fin-Vector Radiation. Procedure for selecting radiation is graphically illustrated with sample capacity tables. Diagrammatic sketches plus engineering data show how to rough in piping for a typical baseboard installation. (Key No. 899)

(Continued on page 102)



STEEL FOLDING CHAIRS

Solid Comfort for Every One --

STOUT, SHORT or TALL



The average adult cannot be comfortably seated in less than an 18 inch space — the exact width of the Clarín chair.

It has a depth of seat that permits passage between rows and allows a person to change his position at no sacrifice of comfort.

Clarín chairs open and close quietly and effortlessly, store compactly. Rubber floor contacts on all four feet protect floors from marring.

Write
CLARIN MFG. CO.
4640 W. Harrison St., Dept. 9
CHICAGO 44, ILL.

There are more *Clarín* steel folding chairs in institutional service than any other make

HOW TO BUILD YOUR NEW SCHOOL

. . . For only **59½¢** PER CUBIC FOOT!

Using Smooth Ceilings System

Yes . . . we said 59½¢ per cubic foot! That's the final cost of this school, recently completed at Mount Savage, Maryland. Completely fireproof, the building has tile wainscots, plastered walls and acoustical ceilings throughout.

Smooth Ceilings System of Flat Slab Construction, used throughout in the Mount Savage School, was in considerable measure responsible for its amazingly low cost.

This NEW Bulletin contains complete facts on how Smooth Ceilings System can cut the cost of your new school.

Write NOW for your FREE copy!



COMPLETE INFORMATION on this NEW STANDARD OF FLAT SLAB CONSTRUCTION

SMOOTH CEILINGS SYSTEM

Metropolitan Life Bldg. - Dept. G - Minneapolis, Minn.



Waste handling costs shrink with new, improved Vul-Cot waste baskets.

- Last longer, are practically indestructible
- Cut maintenance and replacement costs
- Stand hardest wear, rims do not break
- Colors do not chip off—they are part of the fibre itself
- Unlike waste baskets made of wood, will not splinter, aren't heavy
- Unlike waste baskets made of metal, will not dent, rust or corrode
- Are lightweight, easy to handle and clean
- Provide luxury at an economy price. Slight additional first cost saved many times over due to long life and lasting good looks
- Are guaranteed for five years
- Are perfect for schools, offices, institutions

You're assured many years of service—lower costs—with Vul-Cots. Write today for catalog price sheet: Dept. CE-9.

The Round Taper—most popular of all Vul-Cots for general office and school-room use. Takes little space, is neat and attractive. Two sizes, nos. 2 and 3.

The Square Taper—a distinctive style, popular with executives and ideal for reception or board rooms. One size, no. 5.

The Round Straight—specially designed for washrooms, basements, ticker rooms, lobbies, shipping and mailing rooms. Two sizes, nos. 9 and 10.

Colors—All sizes made in standard colors—maroon-brown and olive-green. Gray also available for use with gray office furniture.

For sale by stationers and school supply houses everywhere.

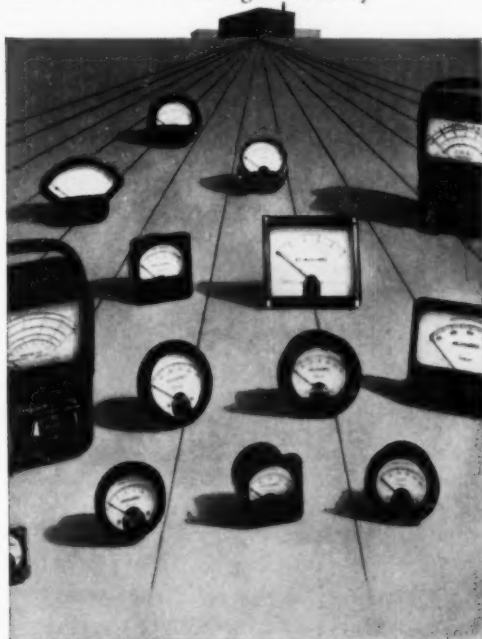
National
VULCANIZED FIBRE CO.
Wilmington • Delaware



SPECIFY *Simpson* for TOMORROW'S ELECTRICAL ENGINEERS

To provide your engineering students and faculty the very best electronic test equipment *specify* Simpson—instruments that stay accurate!

The World's Largest Makers of Electronic Test Equipment—Simpson is renowned among laboratory and field engineers for painstaking laboratory development effort and quality control that delivers reliable instruments of highest accuracy.



*Mail Coupon below for
Free Simpson Catalog*



SIMPSON ELECTRIC COMPANY

5200 W. Kinzie, Chicago 44 • CO 1-1221

Please send me the Simpson catalog showing complete line of Simpson Electrical Instruments and Test Equipment.

Name _____
School _____
Address _____
City _____ Zone _____ State _____

WHAT'S NEW . . .

Opaque Projection Practices is the title of a new publication which is being published by Charles Beseler Co., 60 Badger Ave., Newark 8, N.J. The bulletin will be published periodically and is designed to serve as a medium for the exchange of ideas relating to specific uses of the opaque projector. Articles will be contributed by members of the teaching profession. The publication will contain four pages per issue and will be sent without charge on request to the editor. (Key No. 900)

The **PC Daylighting Nomograph** is designed to make possible the prediction of daylighting levels in a room before the building is constructed. The device was developed at the Pittsburgh Corning Daylighting Research Center and is available from Pittsburgh Corning Corp., 307 Fourth Ave., Pittsburgh 22, Pa. Through the careful study of functional glass block and window performance in existing buildings and in the laboratory under a wide variety of conditions, the data was compiled which served as a basis for the PC Daylighting Nomograph. With the aid of this device the amount of daylight which will be present at any point in a room, and at any time of day and day of the year can be predicted. The effects of building orientation and geographical location, fenestration area, sun altitude and azimuth,

clouds and the like are accounted for. The information required to make the prediction can be obtained from the architect's plans and the local weather bureau records. (Key No. 901)

Suppliers' News

Thomas A. Edison, Incorporated, West Orange, N.J., manufacturer of **Edison Voice Writing Equipment and Edison Televoice**, announces the establishment of direct factory branches in **Chicago at 304 W. Randolph St.** and in **St. Louis, Mo., Peoria, Ill., South Bend, Ind., Rockford, Ill. and Davenport, Iowa.**

Holophane Company, Inc., 342 Madison Ave., New York 17, announces the inclusion of an unusual lecture hall in its newly enlarged executive offices. Forming an integral part of the company's research program, the lecture hall is a **Light and Vision Institute** containing a giant light control board divided into a series of compartments, each showing a specific example of redirecting light through prismatic control. Advanced research in lighting application is demonstrated by Illumineering, the engineering use of color, how much light to use and how to obtain visual comfort.

Johns-Manville, 22 E. 40th St., New York 16, manufacturer of building ma-

terials and allied products, announces the opening of a new floor tile production line at the plant in **Waukegan, Ill.** The new production line increases the output of **Johns-Manville Floor Tile** by more than 2½ times, according to the company.

The Majestic Wax Co., 2139 Blake St., Denver 2, Colo., manufacturer of **Velva-Sheen** wax-polish for floor maintenance, announces that this product, which has been sold in the Rocky Mountain area for more than 25 years, now has nationwide distribution and is available from sanitary supply distributors in all states.

Roddie Plywood Corporation is the new name of the manufacturer of plywood products in **Marshfield, Wis.**, formerly known as **Roddie Lumber and Veneer Co.**

Vestal, Inc., manufacturer of maintenance products, announces the opening of new quarters adjoining the main plant at **4963 Manchester Ave., St. Louis 10, Mo.** The modern styled building provides additional plant capacity and office space and will be used in conjunction with the older Vestal building. The new building is designed to increase production and promote efficiency and has space for a large modern testing and research laboratory.



DURABLE
AND
Smart

AMERICAN
CHAIR COMPANY

FURNITURE

**Wall-Saving
Easy Chair**

No. 8027-1

For prices and complete information on furniture for dormitory, dining hall, library and student lounge, see your dealer or write us. Dept. C.

Design by
Celia Campbell McLean

AMERICAN
CHAIR COMPANY
MANUFACTURERS
SHEBOYGAN, WISCONSIN

HERE'S WHERE
*Pots
AND Pans*
GET CLEANER



Quicker...Easier!

Hundreds of leading hospitals, schools, hotels, restaurants and similar institutions are enthusiastic users of **SOAP NO. 44** and **DISPENSER NO. 44**. The third faucet on your sink automatically controls and delivers rich, sudsy, ready mixed **SOAP NO. 44** wash water at just the right washing strength.

SHINES ON OTHER CLEANING JOBS TOO

SOAP NO. 44 is a rock fusion of synthetic detergents with **SURGICAL GREEN OIL SOAP**. It does every kitchen cleaning job better. Breaks down and purges stubborn greases and gummy foods. It is kind to the hands. Saves time and labor. Costs less to use.

WRITE FOR COMPLETE DATA

ANTISEPTOL COMPANY

DIV. W. F. STRAUSS & CO.

Manufacturers of Quality Cleaners for over 46 years
5524 NORTHWEST HIGHWAY, CHICAGO 30, ILLINOIS

SOAP NO. 44
Proved and accepted
SOAP NO. 44 is
fast becoming a national
cleaning necessity.

SEE YOU
at Our Exhibits
at the
AMERICAN
HOSPITAL
ASSOCIATION
CONVENTION—
St. Louis
September 17-21, 1951
Booth No. 318
and the
AMERICAN
DIETETIC
ASSOCIATION
EXHIBIT—
Cleveland
October 8-12, 1951
Booth No. 9-10

TO CHECK THE QUALITY OF A
Cabinet Shower
MAKE THESE SIMPLE TESTS

Check the Name Plate

If it's a Weisway, you can be sure there's quality in every design detail—even in the hidden parts.

Shake it! Bump it!

Does it clatter and rattle—a makeshift assembly? In a Weisway thick gauge materials are corner sealed in compression-tight joints.

Check the Wall

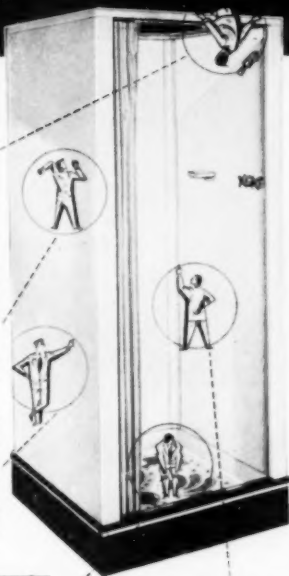
Weisway walls are of Bonderized, galvanized steel with two separately baked-on coats of enamel, assuring years of lustrous beauty.

Examine the Receptor

Is it deep with high sides to give protection against leaking? The answer is "yes" with Weisway exclusive Foot-Grip, No-Slip receptor of vitreous porcelain enamel, safe, sanitary, easy-to-clean.

Run Your Fingers Along the Inside Joints

In a Weisway Cabinet Shower all joints are pressure-tight. No dirt-catching cracks; no need for mastic or caulking. Weisways are permanently leakproof and dependable.



● The closer you check details of Weisway quality the more you'll see why Weisways give you long years of leakproof, trouble-free service. It's easy to modernize with complete, self-contained Weisway baths. Ask your plumbing contractor for details, or write to the factory.

Weisway

HENRY WEIS MFG. CO., INC.

939 Weisway Building, Elkhart, Indiana

WHY *Universal* ROLL-A-WAY STANDS WERE SELECTED



Law, Law, Potter & Nystrom, Architects, Madison, Wisconsin



—for The Gymnasium of This Fine New School

Custom built for the utmost in safety, strength, adaptability, and economy... tested under varying conditions in hundreds of gymnasiums... Roll-A-Way Stands have earned the preferred stamp of approval everywhere. Naturally, they were selected for the gymnasium of this fine new Beloit, Wisconsin, High School. Engineered to fit individual specifications, Roll-A-Ways are obtainable in a wide variety of sizes, with exceptional space-saving features. In this installation,



Sweeping beneath stands is easy. Just lift and fold back front row to get ample clearance for broom or mop.

for example, the 13 tiers occupy 23' depth when open, but only 5' 4 1/4" when closed, thus providing 17' 7 1/4" more usable floor space the entire length of the stands. And notice the vertical filler boards under centers of all seats which enclose the understructure, yet permit placing feet back under seats for properly balanced and comfortable positions. Write for details and prices today.

Universal
BLEACHER COMPANY

806 SOUTH NEIL STREET • CHAMPAIGN, ILLINOIS

Bleacher Experts for Over 30 Years

All across the nation—

Frigidaire is helping schools serve better meals at lower costs!

School staffs know how important appetizing, nourishing food is in keeping students healthy and happy. That's why so many schools continually choose Frigidaire equipment. They know Frigidaire gives the best, safest refrigeration possible. And they've discovered, too, that Frigidaire's matchless trouble-free service and year-in, year-out reliability keep costs really low!

Here are a few of the ways Frigidaire
can serve your school



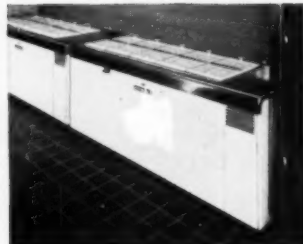
Frigidaire Compressors and Cooling Units safeguard foods' nutritional values in Walk-in Coolers. They provide continuous dependable refrigeration—and at minimum cost because they operate on a trickle of current. Famous Meter-Miser available in $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ hp sizes. Frigidaire reciprocating compressors up to 25 hp. Wide range of gravity and forced air cooling units available.



Frigidaire Water Coolers along school corridors provide a dependable flow of cool, refreshing drinking water. Smartly styled, and whisper-quiet, Frigidaire Water Coolers operate for as little as 2c a day.



Roomy Frigidaire Reach-Ins in school kitchens keep foods fresher, more flavorful longer—by blanketing all food with constant safe cold. Reach-Ins are also used to preserve the full potency of health-saving drugs and medicinals in school dispensaries.



Frigidaire Low-Temperature Cabinets in school cafeterias keep ice cream at just-right temperatures for fast-serving and provide safe storage for frozen foods. They're powered by Frigidaire's thrifty Meter-Miser, simplest cold-making mechanism ever built.

Whatever your refrigeration or air conditioning needs, call your nearby Frigidaire Dealer or District Headquarters office. Look for the name in the Yellow Pages of your phone book under "Refrigeration Equipment." Or write Frigidaire Division of General Motors, Leaside (Toronto 17), Ontario.

FRIGIDAIRE

Water Coolers • Low-Temperature Cabinets • Compressors • Cooling Units
Ice Makers • Self-Contained and Central System Air Conditioners • Beverage Coolers
Reach-In Refrigerators • Electric Dehumidifier • Household Appliances

PRODUCT INFORMATION

Index to "What's New"

Pages 81-102

Key


- 855 Toledo Scale Co.
Toledo Scales
- 856 Fred Medert Products, Inc.
Dynamometer
- 857 Crown Institutional Equipment Co.
Comptometer Desk
- 858 Lawler Automatic Controls, Inc.
Automatic Controls
- 859 The Celotex Corp.
Acousti-Celotex Finish
- 860 J. F. Kerna Co.
Liquisan
- 861 International Bronze Tablet Co., Inc.
Honor Roll Plaque
- 862 Friden Calculating Machine Co., Inc.
Square Root Calculator
- 863 Automatic Pencil Sharpener Co.
Redesigned Pencil Sharpeners
- 864 Ajax Corp. of America
Ice Cube Machine
- 865 The Flour City Brush Co.
Floor Brush Tip
- 866 Safway Steel Products, Inc.
Mobile Work Tower
- 867 Standard Projector and Equipment Co.
Filmstrip Projector
- 868 Weston Electrical Instrument Corp.
Illumination Control
- 869 Ansul Chemical Co.
Dry Chemical Extinguisher

Key

- 870 Multi-Clean Products, Inc.
Seal and Varnish Stripper
- 871 Keston Music Typewriter Co.
Music Typewriter
- 872 Radio Corporation of America
Sound System Console
- 873 Woodlets Inc.
Disposable Toweling
- 874 G. S. Blakelee & Co.
Dishwashing Machine
- 875 Joanna Western Mills Co.
Joanna Wall Covering
- 876 Barnstead Still & Sterilizer Co.
Direct Reading Meter
- 877 The Porter-Cable Machinery Co.
Porter-Cable Sander
- 878 Carl Langwin Incorporated
Sound Lactern
- 879 Oakite Products, Inc.
Heavy-Duty Steam Gun
- 880 Gregory Fount-O-Ink Co.
Ink Remover
- 881 Huntington Laboratories, Inc.
Antiseptic Huntolene
- 882 The Harward Co.
Film Inspecting Machine
- 883 West Disinfecting Co.
Shower Room Sanitation
- 884 The Diversay Corp.
Floor Treatment Materials
- 885 Norcor Mfg. Co.
Tubular Steel Folding Chair

Key

- 886 Carrier Corporation
Room Air Conditioners
- 887 Thompson-Winchester Co., Inc.
Adhesive "Tacks"
- 888 Royal Metal Mfg. Co.
"Platform" Furniture
- 889 The Bolte Co.
Quilted Plastic
- 890 Filtrine Mfg. Co.
Water Cooling System
- 891 Curtis Lighting, Inc.
Glo-Ray Night Light
- 892 The F. W. Wakefield Brass Co.
Wakefield Luminous Acoustical Ceiling
- 893 Chicago Hardware Foundry Co.
Sani-Dry Dryer
- 894 Remington Rand Inc.
"Kardex Utility Cabinets"
- 895 C. Howard Hunt Pen Co.
Boston Pencil Sharpeners
- 896 Owens-Illinois Glass Co., Keylo Div.
"The Story of Keylo"
- 897 General Lamps Mfg. Corp.
"Safety Tip Lamp"
- 898 S. C. Johnson & Son, Inc.
"Facts About Floor Safety"
- 899 C. A. Dunham Co.
Application Manual No. 1295
- 900 Charles Boseler Co.
Opaque Projection Practices
- 901 Pittsburgh Corning Corp.
PC Daylighting Nomograph

USE THIS
CARD 

This card is detachable and is provided for your convenience in obtaining information on all items advertised in this issue. See reverse side.

FIRST CLASS
PERMIT NO. 136
SEC. 34.9 P. L. & R.
CHICAGO, ILL.

BUSINESS REPLY CARD

No Postage Stamp Necessary if Mailed in the United States

2 CENTS POSTAGE WILL BE PAID BY

COLLEGE AND UNIVERSITY BUSINESS

919 NORTH MICHIGAN AVENUE

CHICAGO 11, ILLINOIS

Index to Products Advertised

Key	Page	Key	Page	Key	Page
902 Adams & Westlake Company		922 Dudley Lock Corporation		946 Minneapolis-Honeywell Regulator Co.	
Aluminum Windows	6, 7	Locks	76	Temperature Controls	2nd cover
903 American Chair Company		923 Eastman Kodak Company		947 Monroe Company, Inc., The	
Easy Chair	102	Photocopy Equipment	59	Folding Tables & Chairs	94
904 American Floor Surfacing		924 Electric-Aire Engineering Corp.		948 Moore, Inc., P. O.	
Machine Company		Hand & Hair Dryers	66	Key Control	94
Floor Maintenance	82	925 Englander Company, Inc.		949 National Biscuit Co.	
905 American Radiator & Standard		Sleep Equipment	75	Institutional Food	11
Sanitary Corporation		926 Frigidaire Division		950 National Biscuit Co.	
Plumbing & Heating Equipment	69	Refrigeration Equipment	104	Institutional Food	63
906 American Structural Products Co.		927 Guth Company, Edwin F.		951 National Sporting Goods Assn.	
Glass Blocks	61	School Lighting	15	Sporting Goods	60
907 Antiseptol Company, Div. of		928 Hamilton Manufacturing Co.		952 National Vulcanized Fibre Co.	
W. F. Straub Co.		Laboratory Furniture	14	Waste Baskets	101
Soap & Dispenser	102	929 Hauserman Company, The E. F.		953 Peabody Seating Company	
908 Armour & Company		Movable Interiors	97	School Seating	92
Institutional Food	10	930 Heint Company, H. J.		954 Peterson & Company, Leonard	
909 Bausch & Lomb Optical Company		Institutional Food	54, 55	Laboratory Furniture	96
Microscopes	12, 13	931 Herrick Refrigerator Co.		955 Pick Co., Inc., Albert	
910 Bell & Howell Company		Refrigerators	93	School Furniture	93
Projector	83	932 Heywood-Wakefield Co.		956 Pittsburgh-Des Moines Steel Co.	
911 Burroughs Adding Machine		Institutional Furniture	16	Steel Grandstands	65
Company		933 Hillyard Sales Companies		957 Powers Regulator Company	
Accounting Machine	89	Floor Maintenance	99	Temperature Controls	96
912 California Wire Cloth Corp., The		934 Hobart Manufacturing Co.		958 Presto Recording Corp.	
Subsidiary of The Colorado Fuel		Food Machines	3rd cover	Recorder	58
& Iron Corp.		935 Holcomb Manufacturing Co., J. I.		959 Rastetter & Sons Co., Louis	
Steel Fence	92	Cleaning Materials	68	Folding Chairs	62
913 Celotex Corporation		936 Horn Brothers Co.		960 Remington Rand, Inc.	
Acoustical Material	77	Folding Partitions & Gymseats	71	Photocopy Equipment	56
914 Chicago Hardware Foundry Co.		937 Huntington Laboratories, Inc.		961 Ross & Story Products Corp.	
Stools & Table Bases	99	Floor Maintenance	64	Wall Washing Machines	98
915 Clarin Mfg. Company		938 International Business Machines		962 Scientific Apparatus Makers' Assn.	
Folding Chairs	100	Corp.		Laboratory Equipment	53
916 Clarke Sanding Machine Company		Electric Typewriters	9	963 Sikes Company, Inc.	
Floor Maintenance	51	939 Johnson Service Co.		Institutional Furniture	87
917 Colorado Fuel & Iron Corp., The		Temperature Controls	4th cover	964 Simmons Company	
Wickwire Spencer Steel Div.		940 Kallaggs Company		Institutional Furniture	57
Steel Fence	92	Institutional Food	80	965 Simpson Electric Co.	
918 Corbin Cabinet Lock		941 Kewaunee Manufacturing Co.		Electrical Instruments	101
Lock Boxes	60	Laboratory Equipment	74	966 Sjöström Co., John E.	
919 Crane Company		942 Laboratory Furniture Co., Inc.		Library Furniture	88
Plumbing Equipment	91	Laboratory Furniture	67	967 Slen Valve Co.	
920 Crotty Brothers, Inc.		943 Libbey Glass Co.		Flush Valves	1
Food Service Management	84	Tumblers	85	968 Smooth Ceilings System	
921 Davenport & Son, Inc., A. C.		944 Ludman Corporation		Ceiling Building Method	100
Bulletin Boards	98	Awning Windows	79	969 Spangler Turbine Company	
922 Dolge Company, C. B.		945 Michaels Art Bronze Company, Inc.		Vacuum Cleaners	5
Athlete's Foot Control	86	Exhibit Cases	70	970 Staples Company, H. F.	

September, 1951

Please ask the manufacturers, indicated by the numbers I have circled, to send further literature and information provided there is no charge or obligation.

WHAT'S NEW

833	836	837	838	839
840	841	842	843	844
845	846	847	848	849
850	851	852	853	854
855	856	857	858	859
860	861	862	863	864
865	866	867	868	869
870	871	872	873	874
875	876	877	878	879
880	881	882	883	884
885	886	887	888	889
890	891	892	893	894
895	896	897	898	899
900	901			

ADVERTISEMENTS

902	903	904	905	906	907	908	909
910	911	912	913	914	915	916	917
918	919	920	921	922	923	924	925
926	927	928	929	930	931	932	933
934	935	936	937	938	939	940	941
942	943	944	945	946	947	948	949
950	951	952	953	954	955	956	957
958	959	960	961	962	963	964	965
966	967	968	969	970	971	972	973
974	975	976	977	978	979	980	

NAME

TITLE

INSTITUTION

ADDRESS

CITY

ZONE

STATE

979 Wais Manufacturing Co., Inc.
Henry
Cabinet Showers 103

980 Weston Electrical Instrument Corp.
Electrical Instruments 59

912 Wickwire Spencer Steel Div., of
The Colorado Fuel & Iron Corp.
Steel Fence 92

Hobart's Best Ads are its Products ...IN USE!

Hobart... Breadwinners in all Departments!

Successful over-all operation, when you analyze it, is the sum total of successful departmental operation. And every day, the role of your food and kitchen machines becomes a more important factor in that success. Those machines are your greatest hope for successfully meeting the many problems that arise today.

There are Hobart food machines in every department—costs and maintain standards in every department. You operate—machines that are known as breadwinners, the world over, for their dependable, long-lived performance, their sanitation features, their speed and ease of operation. Only through Hobart can you so easily project your planning, purchasing and servicing over such a wide range of quality machines.

This is the time to plan—and to plan with Hobart. We've stood behind the nation's kitchens—and their Hobart installations—through the ups and downs of over half a century. We'll keep on doing it. Ask your convenient Hobart representative.

HOBART PRODUCTS
 DISHWASHERS • REFRIGERATORS • MIXERS
 GRINDERS • FOOD SLICERS • FOOD CUTTERS
 MEAT LOAFERS • MEAT COMMINERS • MEAT
 TENDERIZERS • CORN MEAL

Hobart Food Machines
 THE HOBART MANUFACTURING COMPANY • TROY, OHIO
 The World's Largest Manufacturer of Food and Kitchen Machines

Our ads can only tell you—all our products show you through performance. And don't forget—every day, Hobart's unrivalled nation-wide service becomes more valuable to you, too! Get in touch today with Hobart, and the most complete line of quality food, kitchen and bakery machines in the business.



Trade Mark of
Quality for
over 50 years

Hobart Food Machines

THE HOBART MANUFACTURING COMPANY • TROY, OHIO
 The World's Largest Manufacturer of Food, Kitchen and Bakery Machines

Room-by-Room
TEMPERATURE CONTROL



V-160
Convactor Valve



V-111 "Sylphon"
Radiator Valve



T-460
"Dual" Thermostat

Outside, cold winds may blow but at Maine University it's always warm and comfortable indoors because many of the buildings on the campus, such as Lord Hall, Wingate Hall and Alumni Hall, are equipped with complete systems of Johnson ROOM-BY-ROOM Automatic Temperature Control. A Johnson "Dual" Thermostat in each room operates Johnson valves and damper operators on each radiator and unit ventilator.

Yet, fuel is not wasted because unoccupied rooms are kept at reduced "economy" temperatures, set from the engineer's panel. This is important because college buildings are used for many and varied purposes throughout the day and evening.



Lord Hall



Wingate Hall



Alumni Hall

University of Maine, Orono, Me. Crowell & Lancaster, architects, Bangor.
Fels Company, mechanical engineers, Portland.

One or more rooms in the "unoccupied" sections can be heated quickly by simply pushing a small button on each Johnson "Dual" Thermostat. This does not disturb the temperature in the remaining rooms in the group, for they continue at the "unoccupied" reduced temperature. That is ROOM-BY-ROOM control, modern service that saves thousands of dollars in fuel costs, completely eliminating waste.

If you are in doubt as to the efficiency of your present temperature regulating equipment, or are planning a new building, call an engineer from a nearby Johnson branch office. His advice is yours, without obligation. JOHNSON SERVICE COMPANY, Milwaukee 2, Wis. Direct Branch Offices in Principal Cities.

JOHNSON *Automatic Temperature and Air Conditioning* **CONTROL**
DESIGN • MANUFACTURE • INSTALLATION • SINCE 1885